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OF

ASIATIC CHOLERA IN THE PHILIPPINE ISLANDS

WITH AN APPENDIX

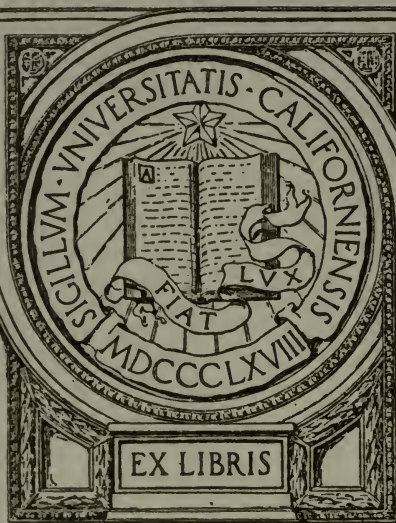
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A HISTORY
OF
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WITH AN APPENDIX

BY
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TABLE OF CONTENTS.

INTRODUCTION	Page. 7
THE OCCURRENCE OF CHOLERA DURING THE SPANISH RÉGIME.....	7-19
Statistics furnished by Dr. Fernando Calderon.....	7
Information from other sources.....	12
Church statistics	16
THE CHOLERA EPIDEMIC OF 1902-1904 IN MANILA.....	19-24
Table showing the cases and deaths in the city of Manila, by months.....	20
Measures adopted in 1902 to hold cholera in check.....	21
Difficulties encountered	22
A new Commissioner of Public Health appointed.....	23
THE CHOLERA EPIDEMIC OF 1902-1904 IN THE PROVINCES.....	24-31
Tables showing the cholera cases and deaths in the provinces during the epidemic of 1902-1904.....	25
Criticism of the 1902 cholera campaign.....	28
Table showing the order in which the provinces became infected and the prevalence of cholera in each province.....	30
THE MANILA CHOLERA EPIDEMIC OF 1905.....	31-40
Table showing, by months, the cases and deaths from cholera in Manila during the epidemic of 1905.....	32
Vicious attitude of a portion of the public press.....	33
"El Soberania Nacional" compelled to retract false statements.....	33
Filipino physicians appointed to San Lazaro.....	39
SUBSEQUENT EPIDEMICS IN THE PROVINCES.....	41-48
Table showing the course of cholera in the provinces, by months, from August 20, 1905, to October 19, 1908.....	41
Summary of provincial epidemics which have occurred since August 20, 1905....	43
Table showing the proportion of cholera cases to population in each of the provinces infected during the epidemic of 1902-1904 and the name of the person or persons, if any, who held the office of president of provincial board of health in each province during the time when cholera was present there....	44
Table showing the number of outbreaks of cholera in each province in which cholera has occurred since August 20, 1905, with the duration of each outbreak and the number of cases and deaths caused by it.....	45
Table showing the proportion of cases to inhabitants, the number of outbreaks of cholera and the force employed in checking the disease in each of the present health districts in which the disease has occurred since August 20, 1905.....	47
SUBSEQUENT EPIDEMICS IN MANILA.....	49-65
The Manila epidemic of May 11 to November 27, 1906.....	49
Table showing cases and deaths, by months, from May 11 to November 27, 1906..	49
The Manila epidemic of July 13, 1907, to March 17, 1908.....	49
Table showing cases and deaths from cholera during the Manila epidemic from July 13, 1907, to March 17, 1908.....	49
The present Manila epidemic	49
Table showing cases, by days, from June 8 to October 19, 1908.....	50
Fear of the San Lazaro cholera hospital diminishes.....	50
Increased hospital facilities required.....	51
Coöperation with the Bureau of Health	51
Valuable assistance given by the police and fire departments.....	52
Volunteer cholera fighters	52
Criticism of the measures adopted for the suppression of cholera during 1908....	53
Reasons for changes in chief health officers.....	56
THE BUREAU OF HEALTH CHARGED WITH RESPONSIBILITY FOR THE OCCURRENCE AND CONTINUED PRESENCE OF CHOLERA IN THE ISLANDS	58-65
Conditions favorable to the propagation of cholera in the Philippines.....	59
The growth of railways a source of danger.....	60
Reorganization of the Board of Health.....	60

THE BUREAU OF HEALTH, ETC.—Continued.		Page.
Claim that Filipinos alone should be employed to combat cholera.....		60
The common people lack confidence in physicians.....		61
The best results obtained by coöperation between Americans and Filipinos.....		61
Disinfectants		61
Subordinate force employed		65
UNSANITARY CONDITIONS IN MANILA.....		65-96
Correspondence between the Director of Health, the Governor-General, the secretary of the Municipal Board, the Director of Public Works, the city engineer, and the Secretary of the Interior relative to the enforcement of the building ordinance		66
Absurd contention of the city engineer relative to payment for strips of land left vacant for ventilation		78
Shall we build a healthful city?.....		82
Memorandum and recommendations relative to public pail sheds for certain districts of the city.....		83
Bad streets an obstacle to sanitary work.....		85
Needless delay in draining certain low lands.....		86
Lack of streets and drains in thickly settled sections.....		86
Shocking sanitary conditions of portions of the San Lazaro Estate.....		86
Correspondence between the Director of Lands, the Secretary of the Interior, the Governor-General, the Attorney-General, and the Municipal Board relative to the duty of the city to construct and maintain streets through the San Lazaro Estate		86
EXPLANATION OF THE CONTINUANCE OF CHOLERA.....		96-128
The establishment of provincial boards of health and their failure to accomplish the desired results		97
The abolition of provincial boards of health and their substitution by health districts recommended		99
The District Health Officer Act and its effect.....		101
The Burdette case		105
Attempts to secure remedial legislation		111
Insufficiency of the present force		112
Table showing the occasions on which medical inspectors and sanitary inspectors regularly serving in Manila have been ordered to the provinces since July 1, 1906		113
The force now available for health work in the provinces		114
Present authorized force		114
Salaries paid to Americans and Filipinos.....		114
Certain deficiencies of Filipino health officers		115
A district health officer asks for accrued leave while fighting cholera, with no substitute available		115
A district health officer deserts his post at the leper colony.....		117
A "cholera expert" requested when the regular district health officer was on duty		119
A district health officer refuses to obey an order to go to a cholera-smitten town because he has the itch.....		120
The "delicate health" of a district health officer interferes with the discharge of his duties		121
A district health officer deserts his post upon the appearance of cholera.....		122
A district health officer who did his duty		124
A district health officer foregoes taking leave in order to fight cholera.....		124
Summary of the situation as regards Filipino district health officers.....		124
What the Bureau of Health has accomplished and what it has failed to accomplish		126
The scanty force of the Bureau of Health makes it necessary to call on other Bureaus for physicians		126
Assignment of Bureau of Science men		126
Assignment of Philippine Medical School men		127
Resulting interruptions to work		127
The discovery of bacilli carriers at Manila during the epidemic of 1908.....		127
Is cholera endemic in the Philippines?.....		128
Table showing the total number of cholera cases and deaths since the American occupation		130
Little danger from cholera to those willing to take ordinary precautions.....		130
Total number of cholera cases and deaths among Americans		130
SUMMARY AND CONCLUSION.....		131-135

TABLE OF CONTENTS OF APPENDIX.

	Page.
THE OPINION OF THE ATTORNEY-GENERAL RELATIVE TO THE POWER OF THE CITY OF MANILA TO COMPEL PRIVATE OWNERS TO FILL AND DRAIN THEIR LOTS AND AS TO THE COURSE WHICH SHOULD BE PURSUED BY THE DIRECTOR OF HEALTH IN ABATING NUISANCES.....	137
Letter to the Acting Director of Health by the sanitary engineer under date of October 30, 1908, and indorsements thereon.....	137
Opinion of the Attorney-General under date of December 24, 1908.....	140
THE FAILURE OF THE ATTORNEY-GENERAL TO CONSIDER CERTAIN PROVISIONS OF LAW IN RENDERING HIS OPINION.....	142
Letter of Secretary of the Interior to Attorney-General under date of February 9, 1909	143
Extraordinary delay of Attorney-General's Office in rendering opinion requested by Secretary of the Interior in his letter of February 9, 1909.....	144
OPINION OF THE SECRETARY OF THE INTERIOR AS TO THE LAW RELATIVE TO THE CLEANSING, DRAINING OR FILLING OF LOWLANDS.....	144
Paragraph (s) of section 3 of Act No. 1150.....	144
Section 793 of the Revised Ordinances of the city of Manila.....	145
Provisions of law clearly contemplate that action to cause the remedying of unsanitary conditions must be taken by City Engineer and by him alone....	146
CRITICISM OF THE ATTORNEY-GENERAL'S OPINION OF DECEMBER 24, 1908	146
Overlooked or ignored certain provisions made by paragraph (s) of Act No. 1150	147
Attorney-General suggests procedure to be followed by Director of Health in remedying unsanitary conditions.....	147
THE DIRECTOR OF HEALTH IN ABATING NUISANCES HAS LONG FOLLOWED THE PROCEDURE SUGGESTED BY THE ATTORNEY-GENERAL..	147
THE DUTY OF THE CITY ENGINEER.....	148
THE GOVERNOR-GENERAL CALLS CERTAIN FACTS TO THE ATTENTION OF THE MUNICIPAL BOARD.....	148
Indorsement of Governor-General under date of January 25, 1909, relative to putting streets through unsanitary districts	148
A LIMITATION ON THE POWER OF THE SECRETARY OF THE INTERIOR TO APPROVE ORDERS FOR THE FILLING OR DRAINAGE OF LOWLANDS.....	148
GENERAL DRAINAGE SYSTEMS MUST BE PROVIDED BY THE CITY.....	149
THE STREETS NECESSARY FOR THE SANITATION OF THICKLY SETTLED DISTRICTS MUST BE BUILT BY THE CITY.....	150
DUTIES OF THE CITY RELATIVE TO THE COLLECTION AND DISPOSAL OF EXCRETA, GARBAGE AND REFUSE.....	150
Section 7 of Act No. 1150.....	150
COMPLAINTS AGAINST THE MUNICIPAL BOARD AND THE CITY ENGINEER..	151
Municipal authorities have persistently neglected to make adequate provision for the collection, and disposal of excreta, garbage, refuse, etc., in certain districts	151
City engineer's negligence in enforcement of building ordinances.....	151
No general improvement in sanitary conditions as a result of the maladministration of city engineer's office.....	152
Practical working of the present arrangement.....	152
Attitude of city authorities toward constructing necessary streets and drains on San Lazaro Estate.....	153
Excerpt from opinion of Attorney-General Araneta as to duty of city relative to building streets on San Lazaro estate.....	153
Indorsement to Municipal Board by Governor-General, under date of October 17, 1907, relative to making arrangements for carrying out proposed improvements on San Lazaro Estate	154
City promises on February 8, 1908, that "The street areas within this zone will receive attention in the near future".....	154
Members of Municipal Board disclaim knowledge of Attorney-General's opinion relative to their duty in improving conditions on San Lazaro Estate.....	155
Letter of Governor-General to Municipal Board under date of December 23, 1908	155

COMPLAINTS AGAINST THE MUNICIPAL BOARD AND THE CITY ENGINEER— Continued.

Page.

Letter of Director of Lands to Municipal Board under date of February 10, 1909, relative to condition of Calle Timbugan, San Lazaro Estate, and first, second, third, fourth, fifth, sixth, seventh, eighth and ninth indorsements thereon	156
Municipal Board has signally failed to discharge its duty relative to the improvement of sanitary conditions on the San Lazaro Estate.....	160
EPIDEMICS ARE EXPENSIVE	160
Cost of recent cholera epidemic in the city of Manila both to the Insular and city governments	160
A WORD OF WARNING	160
SOME ACTUAL PROGRESS MADE.....	161
Projects for improvement of some of the worst unsanitary districts in Manila....	161
APPOINTMENT OF THE SPECIAL COMMITTEE OF CITIZENS AND OFFICIALS..	161
Executive Order No. 3.....	161
Executive Order No. 14, amending Executive Order No. 3.....	162
Specific embarrassing positions in which Secretary of Interior has found himself in exercising the power of approval or of disapproval of orders for filling, in accordance with paragraph (s) of section 3 of Act No. 1150.....	162
THE WORK OF THE SPECIAL COMMITTEE OF CITIZENS AND OFFICIALS....	163
Communication of city engineer to subcommittee of special committee, including outline of plans for sanitary improvements.....	163
Criticism of the proposed procedure outlined in above communication of city engineer to special committee	164
COMPLETION OF THE NEW WATERWORKS.....	165
NUMBER OF PUBLIC CLOSETS INCREASED.....	165
UNSANITARY BUILDINGS VACATED OR REMOVED.....	165
THE EFFORT TO PROVIDE SANITARY BUILDING SITES.....	166
As long ago as 1902 Municipal Board was urged to interest itself in the construction, on city or Insular Government land, of sanitary tenements for the poor	166
DRAINAGE WORK	166
EXTENSION OF WATER SYSTEM.....	167
Places where additional water hydrants have been installed.....	167
RECOMMENDATIONS	167
ANOTHER WORD OF WARNING.....	168
ADDITIONAL HISTORIC DATA AND REPORTS CONCERNING CHOLERA.....	168
ADDENDUM	171
Second, third and fourth indorsements forwarding opinion of Attorney-General, which finally reached the Secretary of the Interior on April 17, 1909, in response to request made on February 9.....	171
Letter of the Attorney-General communicating his opinion, dated April 3, 1909..	171
Comment on above opinion of Attorney-General.....	176
EXHIBIT "A."—LETTER OF SEÑOR EPIFANIO DE LOS SANTOS.....	177
EXHIBIT "B."—"THE SUPPRESSION OF A CHOLERA EPIDEMIC IN MANILA," by THE ACTING DIRECTOR OF HEALTH.....	183
EXHIBIT "C."—SUPPLEMENTARY REPORT ON THE CHOLERA EPIDEMIC OF 1908 IN MANILA, BY THE ACTING DIRECTOR OF HEALTH.....	198
EXHIBIT "D."—"INDICATIONS FOR TREATMENT OF ASIATIC CHOLERA," BY DR. RICHARD P. STRONG, CHIEF OF THE BIOLOGICAL LABORATORY.....	213
EXHIBIT "E."—"THE TREATMENT OF CHOLERA, A SUMMARY OF THE EXPERIENCES OF THE PHYSICIANS AT THE MARY JOHNSTON CHOLERA HOSPITAL," BY HENRY T. NICHOLS, LIEUTENANT, MEDICAL CORPS, U. S. ARMY	219
EXHIBIT "F."—"A SUMMARY OF THE RESULTS OBTAINED IN THE BACTERIOLOGICAL DIAGNOSIS OF CHOLERA," BY MOSES T. CLEGG.....	220
EXHIBIT "G."—REPORT OF THE SPECIAL COMMITTEE OF THE MANILA MERCHANTS' ASSOCIATION	221
EXHIBIT "H."—COMMENT ON REPLY OF MEMBER McDONNELL OF THE MUNICIPAL BOARD TO CERTAIN STRICTURES OF THE COMMITTEE RELATIVE TO CERTAIN UNSANITARY CONDITIONS IN THE CITY OF MANILA	225
EXHIBIT "I."—"ALWAYS PERSECUTED," COPY OF AN ENGLISH TRANSLATION OF AN ARTICLE WHICH APPEARED IN A FILIPINO PAPER.....	231

A HISTORY OF ASIATIC CHOLERA IN THE PHILIPPINE ISLANDS.

INTRODUCTION.

MANILA, *November 5, 1908.*

GENTLEMEN: Twice during the past year the presence of cholera in Manila has seriously interfered with important public events, necessitating the postponement of the Carnival and seriously interfering with the reception to the United States Battle-ship Fleet.

These two occurrences have served to attract widespread attention abroad to the continued existence of cholera in the Philippines, while in Manila, if not throughout the Archipelago generally, there has been an awakening to the fact that the system at present in vogue for the suppression of contagious diseases leaves much to be desired. Simultaneously with this awakening has come a demand that the responsibility for the present situation be fixed and that existing conditions be radically improved. I am of the opinion that this demand is entirely just.

In view of numerous misstatements, many of which doubtless have been made in good faith, concerning the relative frequency and importance of cholera epidemics during the Spanish and the American régimes, it has seemed to me desirable to begin by reviewing the facts so far as they are obtainable.

THE OCCURRENCE OF CHOLERA DURING THE SPANISH RÉGIME.

Not only are the records of the occurrence of cholera during the period when the Philippine Islands were under Spanish rule of a very fragmentary character, but so far as they continue to exist at all they are scattered through the archives in such a way as to make it extremely difficult to refer to them. The following facts are taken from a memorandum very kindly prepared for the Director of Health by Dr. Fernando Calderon, who spent much time in searching the archives and in compiling such information as he was able to obtain therefrom.

There is a difference of opinion as to the date on which cholera first occurred in the Philippines. Dr. Francisco Masip y Vals, medical director of the Civil Hospital of Manila, states that its first appearance was in 1817 and that it then came from India. Don Benito Francia, in writing concerning the cholera epidemic of 1888, says that cholera existed only in India in 1817 and that it was not until the 4th of October, 1820,

that there were observed upon the banks of the Pasig River the first cases that occurred in the Philippines.

Fernando Casas, professor of the Royal Armada, and first physician of the hospital at Manila, in his memoir, the third edition of which was printed in 1832, states that the epidemic recurred in 1821, 1822, 1823, and 1830.

Señor Francia also states that cholera occurred in 1821, 1822, 1823, and 1830, in 1854, from 1863 to 1865, and in 1882, 1883, and 1888, the epidemic of the latter year being the principal subject of his memoir. The epidemic which began in 1888 *officially* terminated in 1889.

Don José Montero y Vidal, in his "Historia de Filipinas," and Padre Buceta, in his "Diccionario Geografico," refer to the cholera epidemic of 1820. Don Felipe Govantes, in his "Compendio de la Historia de Filipinas," refers to the occurrence of cholera in 1822, and his statement agrees with that of Señor Francia as to the continuance of the disease in the successive years.

Don José Montero y Vidal, in speaking of its first occurrence in 1820, says that the natives attributed its origin to the poisoning of water by foreigners and that as a result they murdered twenty-seven foreigners and a large number of Chinese. During recent epidemics evil-minded persons have circulated stories that the Americans were poisoning the wells and streams; employees of the Bureau of Health have been killed, and thus history has repeated itself after so long a time.

Dr. Calderon states that from the data available it can be said with certainty that there were under the Spanish régime seven periods of attack from cholera, namely from 1820 to 1823, 1830, 1842, 1854, 1863 to 1865, 1882 to 1883, and in 1888.

None of the authors cited make any statement as to the total number of cases and deaths during any of the first five periods, but Señor Francia, referring to a statistical table published in 1862 by the subdelegate of surgery, Señor Antelo, states that there were 5,413 deaths in the city of Manila and 13,377 in the province of the same name during this epidemic.

Señor Francia combined in his memoir various statistical tables showing the number of cases which had occurred in different provinces but reserved the privilege of correcting them later when the epidemic should have terminated, which he would not seem to have done.

According to these incomplete figures there were in the province and city of Manila, between the 15th of August and the 1st of October, 1888, 1,970 cases with 1,028 deaths, and during April and the first fifteen days of May, 1889, there were 1,375 deaths, giving a total of 2,403 deaths for the province and city of Manila.

In the Province of Pangasinan there were 978 deaths in 1888 and 2,127 during April, 1889, giving a total of 3,105.

In Nueva Ecija there were 2,170 cases and 1,946 deaths between January 1 and April 30, 1889.

In the district of Morong from the 12th of September to the 11th of October, 1888, and from the 23d of March to the 30th of April, 1889, there were 122 cases with 108 deaths.

In the Province of La Laguna there were from September, 1888, to the 30th of April, 1889, 921 deaths.

In Cavite there were 440 cases and 292 deaths from August, 1888, to the 18th of March, 1889.

In Bataan there were 600 cases and 442 deaths during September, 1888, and April, 1889.

On the Island of Corregidor there were 83 cases and 18 deaths.

In Tayabas there were 253 cases and 129 deaths up to the 30th of April, 1889.

In Tarlac between March 20 and April 30, 1889, there were 515 cases and 440 deaths.

In Bulacan there were 3,492 cases and 1,985 deaths during the year 1888 and between January 1 and April 30, 1889, there were 1,009 deaths, making the total deaths in this province 2,994.

In Pampanga there were 3,678 cases and 2,748 deaths between September, 1888, and April, 1889.

In Zamboanga, between the 26th of January and the 30th of April, 1889, there were 2,271 cases and 1,120 deaths.

From these very fragmentary statistics it would appear that during the epidemic of 1888 and 1889 cholera occurred in thirteen of the forty-one provinces into which the Archipelago was then divided, and caused the death of 16,666 persons; but as will be shown later the epidemic was really far more widespread and serious than Señor Francia's account would lead us to believe.

The epidemic of 1882 is said to have had its origin at Maybun on the Island of Jolo, being brought by the steamer *Johk-ang*. Two hundred persons died at Maybun in forty days. The epidemic spread to Zamboanga and was brought to Manila by the steamer *Francisco Reyes*.

With respect to the origin of the cholera epidemic of 1888, Señor Francia says that during July the first suspicious case occurred at the quarantine station at Mariveles* *although no previous cases had been noted either at the quarantine station or on the vessels entering it. During August it appeared at Taytay although there had been no communication between this place and Mariveles and there was no evidence that cholera had been imported to this place.*

Señor Francia calls attention to the fact that Taytay was out of the

* The italics throughout this report are supplied by the writer. D. C. W.

track of steamers, difficult of access and situated almost in the interior and draws the conclusion that the Taytay case arose spontaneously!

Dr. Calderon has furnished two tables of deaths during the epidemic of 1888 and 1889, the first taken from the memoir of Don Benito Francia and the second from information given by provincial chiefs and found in the archives of the Insular Government. This information is here embodied in a single table:

Table of deaths from cholera during the years 1888 and 1889.

Province.	Sr. Francia's figures.	Figures from archives.	Province.	Sr. Francia's figures.	Figures from archives.
Manila	2,403		Tayabas	129	2,254
Pangasinan	3,105	17,916	Tarlac	440	
Nueva Ecija	1,946		Iloilo		27,217
La Laguna	921		Mindoro		1,190
Cavite	292	1,142	Zambales		2,276
Bataan	442		South Camarines		2,650
Corregidor	18		Capiz		6,727
Bulacan	2,994		Bohol		1,183
Pampanga	2,748	3,917	Benguet		6
Zamboanga	1,120	1,134			
Morong	108		Total	16,666	67,612

A comparison of these two columns will show the very unsatisfactory nature of the statistics with which we have to deal. Señor Francia gives figures for seven provinces and one island (Corregidor) for which no records have been found in the archives.

So far as his figures can be checked with the figures in the archives, which are doubtless the more nearly correct, they are far too low, while in the archives there have been found figures for seven provinces not mentioned by him.

If we accept the figures in the archives for the provinces for which the record has been found and add these to Señor Francia's figures for the remaining provinces mentioned by him, we arrive at a total of 67,612 and there is good reason to believe that this total is far below the actual one.

In this connection the following facts are of interest. There are in the archives formal official declarations of the cessation of the cholera epidemic in the following provinces on the dates named:

Leyte	July 18, 1889
La Union	Sept. 2, 1889
Cebu	Aug. 26, 1889
Antique	Aug. 27, 1889

There were then at least four provinces to which the epidemic must have extended for which we have no statistics whatever.

If the figures for the comparatively recent epidemic of 1888-89 are unsatisfactory those for the epidemic of 1882-84 are still more so.

Dr. Calderon has found tables purporting to give the number of cases

and deaths for the four days from August 28 to August 31, 1882, the totals being as follows:

Month.	Cases.	Deaths in—	
		Hospitals.	Houses.
August 28	470	51	157
August 29	125	70	
August 30	106	58	
August 31	134	65	

It will be observed that on only one day during this period is there any attempt made to give figures for deaths outside of hospitals.

The following table, compiled from figures gathered by Dr. Calderon, shows the number of burials of supposed cholera victims in the cemeteries of Paco, Tondo, Santa Cruz, La Loma, Sampaloc, Ermita, Malate, and San Fernando de Dilao:

For period of twenty-four hours ending September—	Number.	For period of twenty-four hours ending September—	Number.
2	233	12	64
3	170	13	71
4	161	14	40
5	186	15	45
6	125	16	56
7	122	17	28
8	115	18	27
9	85	19	28
10	84		
11	87	Total	1,727

At this time, so far as the cemetery records in the archives are concerned, the epidemic would seem to have ceased with miraculous suddenness.

Tables have also been found showing that thirty-one towns were attacked in the Province of Capiz during 1882 with a mortality of 9,256; that twenty-seven towns were attacked in the Province of Pangasinan during 1882 and 1883 with a mortality of 24,187; also that in the towns of Zamboanga, Maria, Tetuan, Las Mercedes, and Ayala, all in the immediate vicinity of Zamboanga, there were 3,954 cases with 1,719 deaths.

From statistics published in the Official Gazette it would appear that there were 2,108 deaths in Manila between August 29 and September 29, 1882.

There are in the archives records of the declaration of the cessation of the epidemic in only nine provinces as follows:

Pampanga	Feb. 2, 1883
Zambales	Jan. 19, 1883
Cotabato and District of Rio Grande de Mindanao	Jan. 18, 1883
Bulacan	Jan. 29, 1883
South Camarines	Feb. 6, 1883
South Ilocos	Feb. 17, 1883
Cagayan	Mar. 2, 1883
Pangasinan	Mar. 16, 1883
Western Negros	Mar. 28, 1883

Yet we know that this epidemic invaded every province in the Islands, reaching Cebu last of all.

It is evident from the fact that 470 cases of cholera were recorded on August 28, 1882, that the epidemic was in full swing in Manila on that day, although Dr. Calderon has apparently found no statistics for any previous day.

Were we limited to the knowledge of this epidemic derivable from the statistics found by Dr. Calderon we should gain a very erroneous idea of its importance. Fortunately this is not the case, and I will now review briefly such additional information as I have been able to obtain.

As regards the date of the first appearance of cholera in the Philippines, Dr. Francisco Masip y Valls has been good enough to lend me his only remaining copy of his memoir entitled, "El Colera, Desde el Punto de Vista de su Localizacion."

On page 26, I find the statement that "so far as concerns the Philippines in part we know that cholera invaded the Islands in 1817 with terrific lethal force, but what we can not discuss on account of lack of data is the question of whether we should or should not assign to this disease as great antiquity in the Philippines as authors give to it in China and in Cochin-China."

Dr. Masip y Valls gives a footnote in connection with this paragraph which reads as follows:

"It was not enough that cholera should present itself in the Philippines sooner than in Europe. It would be supposed that the doctors had forgotten completely all that concerned their scientific studies, for the reason that there is found but one poor memoir concerning the appearance of that epidemic in 1817, written by a military surgeon, who concealed his name, and printed in the printing office of the Franciscan Fathers of Sampaloc, in Manila."

From this it would appear that Dr. Masip y Valls had documentary evidence to support the belief that cholera appeared in the Philippines at least as early as 1817.

I am indebted to a Spanish gentleman, who was a resident of the Philippine Islands in 1882, for a copy of a pamphlet entitled, "Cuadros Graficos del Desarrollo del Colera en Manila su Provincia y Hospitales de Colericos Establecidos en la Capital segun Datos de la Subdelegacion de Medicina, Manila, 1883." This publication gives curves showing the admitted cases in the city of Manila, in the entire Province of Manila, and those in each of the five Manila cholera hospitals.

From the first of these curves it would appear that cholera broke out in Manila on the 20th of August, 1882, *on which date there were 22 deaths*; that it reached its maximum on the 2d of September with a total of 339 deaths, and then declined rapidly until the 22d of September on which date there were but 14 deaths. After this time the deaths remained constantly low, the largest number on any one day being 30,

the epidemic terminating on the 5th of December with a total of 5,413 deaths.

Unfortunately, as the gentleman remarked who furnished me this publication, *it represents the official truth and not the real truth.* A comparison with Dr. Calderon's statistics hereinbefore given will show the contradictions that exist even in such records as were kept:

Date.	Dr. Calderon, cases.	"Cuadros Gra-ficos," deaths.
August 28.....	470	249
August 29.....	125	229
August 30.....	106	180
August 31.....	134	269

It will be noted that if both of these tables are correct the number of deaths on three days was materially in excess of the total number of cases! The truth is that deaths occurred so rapidly that no record was kept of them except when the deceased were persons of some little importance.

The curve giving the deaths for the Province of Manila with those for the city of Manila shows that the epidemic began on the 20th of August with 20 deaths, reached its maximum on the 4th of September with 619 deaths and ended on the 5th of December, and that the total number of deaths for the city and Province of Manila during this period was 13,377.

Included within the Province of Manila were the towns of Caloocan, Malabon, Navotas, Novaliches, San Juan del Monte, Mariquina, San Mateo, Montalban, San Pedro Macati, Pasig, Pateros, Taguig, Pineda, Malibay, Parañaque, Las Piñas, and Muntinlupa, in addition to the territory at present included within the limits of the city of Manila.

Doubtless the statement for the province is as far below the truth as is the statement for the city of Manila alone.

The curves for the several hospitals show cases and deaths as follows:

Hospital.	Cases.	Deaths.
Tondo.....	490	340
Malate.....	408	220
San Lazaro.....	663	426
Santo Tomas.....	289	129
Tanduay.....	213	128
Totals.....	2,063	1,243

In only one instance have I succeeded in getting any check on these latter figures. Dr. Ariston Bautista Lin states that he was employed in the Santo Tomas Hospital at the time, and that according to his recollection during the first month there were some 600 admissions and

400 deaths! I am forced to the conclusion that the statistics on which these curves are based are very unreliable.

In 1884, in describing an epidemic of beriberi which occurred at Manila during the years 1882 and 1883, Koeniger (Ueber Epidemisches Auftreten von Beriberi in Manila, 1882 and 1883, Deutsch Archiv. fur Klin. Medizin, 1884, 35, 419) incidentally refers to this outbreak and makes the following statement in regard to it:

"From August to October, 1882, Manila was visited by a severe cholera epidemic, which there found a fertile soil, carrying off fifteen to twenty thousand victims. A panic occurred among the natives as well as among the European population, because cholera had not been present since 1865, and as the mortality was more than 75 per cent. After the epidemic had subsided, on October 20 a terrible typhoon visited the city and province and destroyed all suburban houses built of light materials."

There is a rather striking difference between Koeniger's figures of 15,000 to 20,000 deaths and those published in the Official Gazette, which gives 2,108 as the number of deaths occurring in Manila in 1882; and those in "Cuadros Graficos" which give 5,413.

I have been informed by persons living in Manila at the time that for a considerable period deaths were believed to have occurred at the rate of about a thousand per day.

Father Chouza informs me that on a single day, when the epidemic was at its worst, there were 1,300 deaths; that there were not sufficient persons employed at the cemeteries to bury so large a number of dead, and that Governor-General Primo de Rivera sent a battalion of engineers to the La Loma Cemetery to assist in the work.

Dr. Eliodoro Mercado, who was a medical student at the time of this epidemic, states that when it was at its worst one could not pass along Calle Cervantes or through the San Lazaro estate on account of the odor from decaying bodies.

I have been informed by credible witnesses, who lived in Manila at the time, that the streets leading to the cemeteries were often completely blocked with calesins, carromatas, victorias, carts, and other vehicles carrying the bodies of the dead.

It is a well-known fact that under Spanish rule it was the custom to prohibit the dissemination of information as to the prevalence of dangerous communicable diseases.

Much may be said in favor of such a policy, as the popular alarm incident to an outbreak of epidemic disease often tends to create conditions which facilitate its spread. In view of the determined effort so recently made in San Francisco to conceal the presence of bubonic plague in that city, Americans certainly can not afford to be hypercritical in considering the policy pursued by the Spanish Government in these Islands relative to the making known of the truth in regard to the prevalence of cholera.

However, as our own policy has always been to publish the exact truth,

so far as obtainable, relative to the prevalence of communicable diseases, it must be clearly remembered that no direct comparison between the Spanish health statistics and our own is possible.

Familiar as we are with the *general* policy pursued by the Spanish Government in this matter, it becomes important to ascertain whether there was any deviation from it in connection with the epidemics which began in 1882 and 1888, respectively. I am informed by reliable Spanish citizens who were present in the Philippines at the time and whose official position was such that they were necessarily cognizant of the facts, that there was no such departure. It is commonly stated that the great typhoon which occurred on October 20, 1882, terminated the epidemic which began in that year, but this is not the case. It is doubtless true that the number of cases had become greatly diminished at the time of this storm and advantage was taken of this fact and of the occurrence of the storm to state that the epidemic had ended and to assign a cause for its cessation which would appeal to the imagination of the common people.

The truth is that the Governor-General gave orders that after a certain date no more cases of Asiatic cholera should be reported as such but that they should be called "*entero-colitis*," "*gastro-enteritis*," or "*cholera nostras*" and this was done. A special ward was set aside at the San Juan de Dios Hospital for the continued treatment of cholera cases which were, however, diagnosed as directed by the Governor-General.

The policy of concealing the existence of cholera in Manila and of reporting deaths from it as having been occasioned by other diseases was steadily followed until the cases again became so numerous in 1888 that further concealment was hardly possible. At this time certain Spanish physicians of the city, being convinced of the imperative necessity for taking active measures for holding the disease in check, appointed one of their number to call on Governor-General Weyler and inform him that cholera was present and that the number of cases was such as to offer a very serious menace to the public health. The gentleman thus delegated to visit the Governor-General is to-day a resident of the city of Manila and informs me that the Governor-General, after listening to him, replied that he knew why he had come to him; that what he really wanted was eight hundred or a thousand pesos a month as additional salary to divide with his colleagues; that he would not give them a cent; and *that there was no cholera in the city!* On being interrogated as to what name should then be assigned to the "*prevailing ailment*" he made the inquiry; "*Why do I have doctors?*" In this case a word to the wise was naturally sufficient and the unfortunate envoy was elected by his colleagues to take charge of the cholera ward at the San Lazaro Hospital where the victims of the disease were entered as suffering from other complaints.

Later when it suited the purpose of the Governor-General to discredit the chief health officer and when, indeed, cases had become so numerous

that concealment was no longer possible, the presence of cholera was announced, and the chief health officer was savagely assailed for having allowed it to enter the Islands, although in point of fact it is well known to have originated in the vicinity of Taytay.

In view of these facts it seemed to me very important, in attempting to trace the history of cholera in the Philippines, to ascertain the number of deaths ostensibly due to "entero-colitis," "gastro-enteritis" and "cholera nostras" under which headings cholera deaths were entered.

Through the courtesy of the Most Reverend Jeremiah J. Harty, Archbishop of Manila, all existing church records of deaths in the city from 1883 to 1897, inclusive, have been placed at my disposal, and with the kind and invaluable assistance of Father Chouza, who has supervised the compiling of statistics therefrom, the following facts have been ascertained:

Year and month.	"Entero-colitis" and "gastro-enteritis"	"Cholera."	Total deaths from cholera.	Total deaths, all causes.	Year and month.	"Entero-colitis" and "gastro-enteritis"	"Cholera."	Total deaths from cholera.	Total deaths, all causes.
1883.					1886.				
January	29	13	42	1,581	January	22		22	200
February	116	68	184	717	February	23	1	24	207
March	118	72	190	675	March	13	2	15	206
April	120	91	211	658	April	12		12	162
May	212	107	319	792	May	17		17	147
June	87	62	149	569	June	19	1	20	180
July	104	77	181	584	July	29		29	213
August	28	9	37	411	August	15		15	205
September	20		20	300	September	32	1	33	235
October	25	1	26	303	October	19		19	263
November	11		11	319	November	20	2	22	257
December	8		8	373	December	19	1	20	267
Total	878	500	1,378	7,282	Total	240	8	248	2,542
1884.					1887.				
January	2		2	455	January	13	1	14	239
February	9		9	561	February	12		12	201
March	8		8	787	March	20		20	228
April	1	1	2	394	April	25		25	224
May	3	1	4	286	May	23		23	242
June	6	2	8	205	June	52	2	54	324
July	8		8	272	July	70		70	304
August	7		7	305	August	42		42	288
September	11		11	365	September	19		19	296
October	5		5	402	October	48		48	322
November	4		4	356	November	32	1	33	423
December	6		6	347	December	38		38	432
Total	70	4	74	4,735	Total	394	4	398	3,523
1885.					1888.				
January	4		4	286	January	33		33	391
February	4		4	250	February	21		21	304
March	6	1	7	224	March	21		21	260
April	10		10	244	April	29		29	274
May	4		4	205	May	28	1	29	316
June	1		1	176	June	31		31	278
July	10		10	192	July	52	1	54	322
August	20	4	24	215	August	79	12	91	362
September	13	2	15	227	September	72	115	187	619
October	14	1	15	220	October	36	2	38	372
November	10		10	188	November	26	1	27	374
December	8		8	234	December	50	1	51	365
Total	104	8	112	2,661	Total	479	133	612	4,237

Year and month.	"Entero-colitis" and "gas-tro-enteritis"	"Chol-era."	Total deaths from chol-era.	Total deaths, all causes.	Year and month.	"Entero-colitis" and "gas-tro-enteritis"	"Chol-era."	Total deaths from chol-era.	Total deaths, all causes.
1889.					1893—Cont'd.				
January	31	2	33	343	August	111		111	444
February	14		14	283	September	62		62	339
March	40	16	56	391	October	33		33	296
April	60	207	267	740	November	45		45	336
May	28	288	316	875	December	38		38	393
June	34	29	63	446	Total	703		703	4,887
July	67	16	83	423	1894.				
August	109	25	134	427	January	30		30	515
September	50	10	60	229	February	31		31	620
October	22	2	24	275	March	32		32	1,136
November	12		12	223	April	36		36	970
December	20		20	237	May	30		30	545
Total	487	595	1,082	4,892	June	59		59	446
1890.					July	139		139	582
January	15	1	16	218	August	108		108	559
February	23		23	221	September	62		62	443
March	28		28	249	October	42		42	416
April	36		36	322	November	39		39	506
May	35		35	293	December	57		57	573
June	123	4	127	404	Total	665		665	7,311
July	141		141	432	1895.				
August	95	1	96	351	January	47		47	454
September	29		29	249	February	35		35	389
October	33		33	270	March	32		32	344
November	27		27	351	April	30		30	333
December	31		31	402	May	45		45	326
Total	616	6	622	3,762	June	163		163	496
1891.					July	202		202	545
January	39		39	492	August	171		171	600
February	35		35	527	September	91		91	491
March	47		47	503	October	56		56	526
April	31		31	465	November	46	1	47	463
May	35		35	538	December	36		36	394
June	34		34	345	Total	954	1	955	5,361
July	55		55	407	1896.				
August	74		74	462	January	44		44	407
September	47	1	48	483	February	52		52	373
October	35	1	36	436	March	51		51	469
November	25		25	352	April	49		49	563
December	31		31	313	May	57		57	588
Total	488	2	490	5,323	June	172		172	597
1892.					July	270		270	723
January	42		42	352	August	168		168	535
February	38		38	301	September	76		76	414
March	39		39	301	October	45		45	392
April	38		38	317	November	71		71	414
May	53		53	317	December	51		51	425
June	67		67	305	Total	1,106		1,106	5,900
July	133		133	426	1897.				
August	104		104	439	January	58		58	340
September	53		53	356	February	65		65	342
October	46		46	414	March	45		45	336
November	57		57	463	April	82	2	84	402
December	45		45	426	May	59	1	60	418
Total	715		715	4,417	June	70	1	71	432
1893.					July	98		98	418
January	38		38	380	August	96		96	428
February	40		40	287	September	46		46	368
March	32		32	379	October	49		49	388
April	40		40	450	November	72		72	412
May	28		28	527	December	51		51	393
June	70		70	464	Total	791	4	795	4,677
July	166		166	592					

From these tables it appears that in spite of prohibitions some deaths were recorded as being due to *cholera* during each year of this period except 1892, 1893, 1894 and 1896, and that during these latter years the deaths from "*entero-colitis*" and "*gastro-enteritis*" were 715, 703, 665, and 1,106, respectively.

While it is doubtless true that some of these deaths were due to acute intestinal troubles other than Asiatic cholera, such for example as cholera nostras, the important fact is that they were believed to be Asiatic cholera and that, judging from the observed facts relative to the occurrence of cholera nostras, this belief was doubtless well founded in most cases.

It must be remembered furthermore that the records of Malate and those of Binondo up to 1894 furnish no information, as no statements of the causes of death were given; a large number of deaths occurring in Intramuros were also recorded without any statement of the cause of death; all of the records of the Paco Church were burned in 1889; and finally the area included within the city of Manila in Spanish days was materially smaller than that included within the present city limits.

The annual death rate per thousand has steadily fallen since the establishment of the Board of Health and is now certainly lower than it was during the period covered by these statistics. The average annual number of deaths for the past five years has been 9,522. When this total is compared with the average annual number of deaths given in these church records as 4,708, it is evident that considerable less than half of the deaths which must actually have occurred in the region included within the present limits of the city of Manila are recorded.

Supplementing these very interesting figures, Dr. Eliodoro Mercado has stated to me that when he was serving in the San Juan de Dios Hospital in 1885, five or six cases of true cholera were being brought to that institution daily. *As usual, however, they were not entered as cholera cases.*

So far as concerns the provinces, information relative to the concealment of the presence of cholera is more difficult to obtain, but through the presence in Manila of a Spanish physician who was assigned to duty in the Province of Cagayan in 1884, I have learned that there was an epidemic there during that year. It was not so widespread as the previous one, nor was the infection so virulent, nevertheless the loss of life was considerable. All of the precautions which would naturally be taken in dealing with cholera were adopted, *but it was deemed best to conceal the true nature of the disease.*

Let us have done then with idle talk about the good old days when cholera did not prevail in the Islands to any such extent as at present. *Let us remember that there was one day in 1882 when the number of deaths from cholera in Manila was thirty-four times the largest number that has occurred on any one day since the American occupation!* Let us not forget that the epidemic which is variously stated to have begun

in 1817, 1819, and 1820, at all events continued during the years 1821, 1822 and 1823 and recurred in 1830; also that epidemics of cholera occurred in 1842, 1854, 1863-1865, 1882-1885, 1888 and 1889; that the *officially* admitted mortality for 1888 and 1889 in the city of Manila was 2,403 and in only a portion of the provinces to which the disease is known to have extended at that time was 16,666; that a reliable German physician places the mortality in Manila during 1882 alone at 15,000 to 20,000, and that very incomplete figures for the provinces during the years 1882 and 1883 give the deaths at 76,884; and finally that cholera cases occurred at Manila during 1886, 1887, 1890, 1891, 1892, 1893, 1894, 1895, 1896 and 1897, the least recorded number during any one of these years being 248 in 1886 and the greatest 1,106 in 1896.

THE EPIDEMIC OF 1902-1904.

On March 3, 1902, the attention of the Chief Quarantine Officer of the Philippine Islands was called to the existence of Asiatic cholera in Canton, China. Five days later it was reported to be in Hongkong. Manila had been depending largely upon Canton for green vegetables. Notice was at once sent to the officer of the United States Public Health and Marine-Hospital Service at Hongkong that all vegetables not certified by him would be refused admission, and on March 19th an order was issued to the Chief Quarantine Officer of the Philippine Islands forbidding the further importation of green vegetables, while as an additional precaution the Commissioner of Public Health instructed his subordinates to report immediately all cases of persons suffering from bowel trouble of a suspicious character.

On March 20, at 2.30 p. m., it was found that two patients in the San Juan de Dios Hospital were developing symptoms of cholera. Specimens of their dejecta were taken by the Director of the Biological Laboratory, cultures were immediately prepared therefrom and on the following morning it was definitely known that the disease was truly Asiatic cholera. Later in the day on March 20 two additional cases developed. On the 21st there were 6, on the 22d, 4, on the 23d, 8, and on the 24th, 14. Thus the cholera epidemic of 1902-1904 began.

Very energetic measures were immediately adopted to prevent the spread of the disease. These measures aroused hostility, and the officers of the Board of Health, as well as the Secretary of the Interior, were savagely attacked in the public press for saying that the disease was Asiatic cholera. Reputable physicians who had lived in the country for years insisted that it was not, *stating that a similar disease came every year just before the rains or at the time of harvesting the new rice; that it was due to climatic conditions or to the eating of rice not fully matured, and that it was not contagious.*

As to the origin of this epidemic, it is definitely known that a quantity of condemned Chinese vegetables were thrown overboard from a steamer in the bay, in violation of orders, and were in part washed ashore in the

Farola district of Manila, and it seems probable that some of these were eaten without being properly cooked by the people of that district, where the first cases appeared.

However, in view of the emphatically reiterated statements of local physicians that a disease *identical* with that which presented itself at this time, and which proved to be Asiatic cholera, had occurred annually for many years there would seem to be good reason for believing that cholera of a mild form had been endemic in the Islands and that this epidemic was merely a recrudescence.

In order to convince the public of the true nature of the disease and of the necessity of vigorous and radical measures if a general epidemic was to be avoided, the official statement of the Director of the Biological Laboratory was widely published but this, too, failed of its purpose and for several months there were not lacking intelligent laymen and even physicians who insisted that there was no cholera in the Islands. Unfortunately, their belief was ill founded and the epidemic which began on March 20, 1902, did not terminate in Manila until February 29, 1904, prior to which time there were 5,581 cases and 4,386 deaths, while in the provinces it lasted until March 8, 1904, with 160,671 cases and 105,075 deaths.

In considering the spread of the disease I shall trace its course, first, in Manila, and then in the provinces.

THE EPIDEMIC IN MANILA.

The cases and deaths were as follows:

Month and year.	Total cases.	Deaths.	Month and year.	Total cases.	Deaths.
1902.			1903—Continued.		
March	108	90	April	33	27
April	586	406	May	230	212
May	550	442	June	39	38
June	601	492	July	42	38
July	1,368	1,053	August	89	72
August	720	581	September	290	263
September	273	179	October	127	118
October	87	57	November	31	26
November	336	236	December	14	13
December	35	24	1904.		
1903.			January	4	5
January	7	4	February	3	3
February	2	1	Total		
March	6	6	5,581		
			4,386		

On March 23, 1904, the Board of Health adopted the following resolution:

Whereas the last case of Asiatic cholera occurred in the city of Manila on February 29, 1904, there having been but four positive or suspected cases of Asiatic cholera in the city of Manila since January 6, 1904; and

Whereas the provinces adjacent to Manila have been free from cholera during the present year: On motion

Resolved, That the city of Manila is, and is hereby declared, free from the infection of Asiatic cholera.

MEASURES ADOPTED IN 1902 TO HOLD CHOLERA IN CHECK.

At the time of the outbreak Governor Taft was in the United States, Acting Governor Wright was in Leyte, the Secretary of Finance and Justice was in Japan, and there were present in Manila only the Secretary of Public Instruction and the Secretary of the Interior. As the executive head of the Government was absent and there was no quorum of the legislative body, I of necessity arrogated to myself powers which I did not lawfully possess, appointing employees and incurring expenses without the usual formalities.

On the morning of March 21 I informed General Chaffee that four cases of cholera had occurred in Manila and requested that an adequate military force be dispatched to the valley of the Mariquina River to protect the city water supply from possible contamination.

This request was promptly acceded to and the guard thereafter maintained proved adequate to prevent infection of the city water although there are three towns on the river above the intake and it was the custom of the people to bathe and wash their clothing in its waters.

The filthy surface wells of the city were filled as rapidly as possible, and those that could not be filled were closed.

The people, entirely unaccustomed as they were to any sanitary restrictions, believing as many of them did that the disease was not cholera and firm in their conviction that they had a right to do whatever they liked so long as they kept on their own premises, bitterly resented the burning or disinfection of their houses and effects and the restriction of their liberty to go and come as they pleased, and, in spite of the fact that the number of cases was kept down in a manner never before dreamed of at Manila, there arose an increasingly bitter feeling of hostility toward the work of the Board of Health. *In fact the very success of the campaign proved an obstacle and we were assured that the disease could not be cholera, as if it were there would be a thousand deaths a day!*

An educational campaign was immediately begun and simple directions for avoiding cholera were published and scattered broadcast. Distilled water was furnished gratis to all who would drink it, stations for its distribution being established through the city, supplemented by large water wagons driven through the streets. The sale of foods likely to convey cholera was prohibited. Large numbers of emergency sanitary inspectors were immediately appointed and every effort was made to detect all cases as soon as possible. A land quarantine was established about the city.

In anticipation of a possible extensive outbreak of contagious disease a detention camp capable of accommodating some 2,500 people had been established on the San Lazaro grounds, and to this place were taken the cholera "contacts." A cholera hospital was also established on these grounds and the sick were removed to it from their homes as speedily as

possible, the buildings which they had occupied being thoroughly disinfected or burned when disinfection was impracticable.

The bodies of the dead were at the outset either buried in hermetically sealed coffins or cremated. When the detention camp and hospital at San Lazaro threatened to become crowded a second camp and hospital were established at Santa Mesa. At this latter place not only "contacts" but the sick as well were obliged to live in tents.

The Spanish residents were allowed to establish a private cholera hospital in a large and well-ventilated convento on Calle Herran. As the number of sick Spaniards was nothing like sufficient to fill this building they were asked to turn over the unoccupied space in it to the Board of Health which they most generously did.

In response to popular clamor a hospital under strictly Filipino management was opened in a nipa building in Tondo. Interest in it soon flagged and the Government found itself with this institution on its hands.

DIFFICULTIES ENCOUNTERED.

The epidemic came soon after the close of a long continued war and there were at that time in Manila not a few evil-intentioned persons, both foreign and native, who welcomed every opportunity to make trouble. The difficulties arising from the claim advanced by so many reputable medical men that the disease was not cholera at all were sufficiently great, but they were enormously increased by false and malicious tales to the effect that "contacts" were killed at the detention camp, that patients on arrival at the cholera hospital were given a drink of poisoned "vino" and instantly dropped dead, that the distilled water distributed free of charge was poisoned, and that the Americans were poisoning the wells.

The necessary use of strychnine as a heart stimulant at the cholera hospital was made the basis for a story that the sick were being poisoned with this drug.

These silly tales were widely circulated and quite generally believed and as a result of the fear thus engendered, and of the desire on the part of relatives and neighbors of the sick to escape disinfection and quarantine, strong efforts were often made to conceal the sick and the dead and when this was not possible the "contacts" usually ran away. There were not wanting instances of the driving of cholera victims into the streets.

In spite of the generally hostile attitude of the public and some grave mistakes in policy, the measures adopted sufficed at the outset to hold the disease in check to an extent which surprised even the health officers themselves.

The maximum number of cases for any one day in March was 15. In April it was 38, this number occurring on the 30th of that month.

On the 1st and 14th of May 38 cases were again recorded and there then began a rapid and quite steady decline. On the 24th there were 6 cases, on the 28th, 5, and on the 31st, 5.

In June, however, the number began to creep up again reaching a maximum of 42 on the 30th. During July it grew steadily larger and on the 25th of that month there were 91 cases, *the largest number which has ever occurred in Manila on any day since the American occupation.*

A NEW COMMISSIONER OF PUBLIC HEALTH APPOINTED.

Throughout the early months of the epidemic Major Maus had labored unceasingly to check it, displaying an energy and an indifference to fatigue and personal discomfort which were highly commendable. The long-continued strain ultimately began to tell on him severely and it became evident that while he was quick to throw an organization into the field he easily became discouraged and then wanted to smash his machine and build a new one to take its place.

He had applied for leave of absence and advantage of this fact was taken to arrange for his successor. On May 17 orders were received from the Adjutant-General's Office providing for his relief on or about July 30, and stating that Maj. E. C. Carter, of the United States Army Medical Corps, would be available for detail as Commissioner of Public Health on that date if his services were desired. Arrangements were accordingly made to have Major Carter proceed to the Philippines.

It was known that he would arrive early in August and the original intention was to have him substitute Major Maus as soon after his arrival as he could become familiar with his duties, but the startling increase in the number of cholera cases during July coupled with the fact that Major Maus was obviously upon the verge of a nervous breakdown, led the Acting Civil Governor to accept his resignation on the 31st without waiting for the arrival of his successor.

Dr. Frank S. Bourns, who had been a major of Volunteers in the Army Medical Corps, and had refused appointment as Commissioner of Public Health when the position was offered to him by Governor Taft prior to the appointment of Major Maus, was urged to give up his private business and take charge temporarily until the cholera situation in Manila was again brought under control.

Up to that time the cases by months had been for March (twelve days only), 108 cases; April, 586 cases; May, 550 cases; June, 601; July, 1368, and the average for the week preceding the acceptance of Major Maus' resignation had been 61 per day, a figure never once reached since.

On the 8th of August Major Carter arrived and announced his readiness to assume his duties, but it was suggested to him that he ought first to have some time to familiarize himself with them, and Dr. Bourns

was left free to carry out the special work for which he had been appointed.

This he did with promptness and dispatch, the number of cases for August being but 720 as against 1,368 for the previous month. On the 8th of September, having brought the situation well in hand he insisted on resigning in order to attend to his private affairs, which were suffering from neglect, and his resignation was reluctantly accepted.

Dr. Bourns' remarkable success in dealing with a very bad situation was largely due to his readiness to adopt measures which, while thoroughly effective, were less harsh and irritating to the public than were those which had been employed by his predecessor.

The policy which he had inaugurated was followed by his successor with the result that the cases fell to 275 in September and 88 in October. In November there was a slight recrudescence, the total number of cases reaching 341, the maximum number on any one day being 44, but the disease did not again threaten to escape control and in February practically disappeared there being but two cases during the entire month.

In March there were six cases, in April 32, and in May, possibly owing to the unfavorable climatic conditions which occur during that month and which, according to Spanish and Filipino physicians, had favored the development of the disease resembling cholera during previous years, there were 230 cases. In June the number fell to 39. In July it was 42; in August, 89; in September, 290; October, 127; November, 31; December, 14; January, 4; and in February the number was 3. In March there were no further cases and thus the epidemic of 1902-1904 ended in Manila with 5,581 cases.

In view of the conditions which then prevailed and of the extreme risk of a general infection of the city water supply which, had it occurred, would doubtless have resulted in the death of a third of the population, this is a record of which the Bureau of Health may well be proud.

At the beginning of the epidemic the detail of medical officers from the United States Army was requested, and within ten days thirty-one were assigned to duty with the Board of Health. During the first two weeks of the epidemic 1,500 men, nearly all Americans, were employed and the number of employees was subsequently increased until it reached about 5,000.

THE EPIDEMIC OF 1902-1904 IN THE PROVINCES.

[The effort to prevent the spread of infection by maintaining a land quarantine around Manila proved entirely ineffective.] The disease promptly appeared in the provinces where the campaign against it was from the outset in charge of newly appointed Presidents of Provincial

Boards of Health, aided, when practicable, by medical inspectors from Manila.

The following table gives the results in summary form:

Table showing in summary form the cholera cases and deaths in the provinces during the epidemic of 1902-1904.

Month and year.	Number of cases.	Number of deaths.	Month and year.	Number of cases.	Number of deaths.
1902.			1903—Continued.		
April-----	1,927	1,417	June-----	3,554	2,945
May-----	2,407	1,631	July-----	4,167	2,806
June-----	5,204	4,097	August-----	10,212	7,406
July-----	7,757	5,807	September-----	4,613	3,672
August-----	11,247	7,874	October-----	2,531	1,969
September-----	43,346	27,410	November-----	1,119	937
October-----	30,837	18,572	December-----	364	270
November-----	12,353	6,681			
December-----	5,918	3,583			
1903.			1904.		
January-----	4,921	2,757	January-----	35	24
February-----	2,997	2,009	February-----	61	42
March-----	1,903	1,124	March-----	23	10
April-----	1,772	1,147	April-----	1	0
May-----	1,402	885	Total-----	160,671	105,075

Table showing, by months, the provinces infected by cholera, with the total number of cases and deaths during each month.

Month, year, and provinces.	Cases.	Deaths.	Month, year, and provinces.	Cases.	Deaths.
1902.			1902—Continued.		
April:			July—Continued.		
Bulacan-----	1,927	1,417	Zambales-----	7,757	5,807
Rizal-----			Union-----		
Cavite-----			Ilocos Sur-----		
Bataan-----			Cebu-----		
Camarines-----			Ilocos Norte-----		
Pampanga-----			Sorsogon-----		
Pangasinan-----			Bohol-----		
Tarlac-----			August:		
May:			Bulacan-----	11,247	7,874
Bulacan-----	2,407	1,631	Rizal-----		
Rizal-----			Cavite-----		
Cavite-----			Bataan-----		
Bataan-----			Camarines-----		
Camarines-----			Pampanga-----		
Pampanga-----			Pangasinan-----		
Pangasinan-----			Tarlac-----		
Nueva Ecija-----			Leyte-----		
Leyte-----			Batangas-----		
Batangas-----			Laguna-----		
Laguna-----			Samar-----		
Samar-----			Mindoro-----		
June:			Tayabas-----		
Rizal-----	5,204	4,097	Zambales-----		
Camarines-----			Union-----		
Pampanga-----			Ilocos Sur-----		
Laguna-----			Cebu-----		
Mindoro-----			Ilocos Norte-----		
Tayabas-----			Sorsogon-----		
July:			Bohol-----		
Rizal-----			Albay-----		
Camarines-----			Negros Occidental-----		
Pampanga-----			Iloilo-----		
Tarlac-----			Benguet-----		
Laguna-----			Masbate-----		
Marinduque-----			Cagayan-----		

Table showing, by months, the provinces infected by cholera, with the total number of cases and deaths during each month—Continued.

Month, year, and provinces.	Cases.	Deaths.	Month, year, and provinces.	Cases.	Deaths.
1902—Continued.			1903—Continued.		
September:			February—Continued.		
Rizal	43,346	27,410	Zambales	2,997	2,009
Camarines			Cebu		
Pampanga			Sorsogon		
Tarlac			Bohol		
Laguna			Albay		
Union			Negros Occidental		
Ilocos Sur			Surigao		
Ilocos Norte			Capiz		
Sorsogon			Romblon		
Bohol			Antique		
Albay			Misamis		
Iloilo			Masbate		
Benguet			March:		
Surigao			Camarines	1,903	1,124
Capiz			Nueva Ecija		
Negros Oriental			Leyte		
Romblon			Samar		
October:			Zambales		
Rizal	30,837	18,572	Cebu		
Camarines			Sorsogon		
Tarlac			Bohol		
Laguna			Negros Occidental		
Union			Capiz		
Ilocos Sur			Antique		
Ilocos Norte			Misamis		
Sorsogon			Masbate		
Bohol			April:		
Iloilo			Rizal	1,772	1,147
Benguet			Camarines		
Romblon			Pampanga		
Antique			Leyte		
Misamis			Samar		
Masbate			Zambales		
November:			Cebu		
Rizal	12,353	6,681	Sorsogon		
Camarines			Bohol		
Tarlac			Albay		
Ilocos Sur			Negros Occidental		
Ilocos Norte			Surigao		
Sorsogon			Capiz		
Bohol			Negros Oriental		
Iloilo			Misamis		
Benguet			Cagayan		
Surigao			May:		
December:			Bulacan	1,402	885
Camarines	5,918	3,583	Rizal		
Ilocos Norte			Cavite		
Sorsogon			Camarines		
Bohol			Pampanga		
Iloilo			Leyte		
1903.			Laguna		
January:			Samar		
Rizal	4,921	2,757	Cebu		
Camarines			Ilocos Norte		
Pampanga			Sorsogon		
Nueva Ecija			Bohol		
Leyte			Albay		
Batangas			Negros Occidental		
Samar			Iloilo		
Zambales			Capiz		
Cebu			Misamis		
Sorsogon			Masbate		
Bohol			Cagayan		
Albay			June:		
Negros Occidental			Bulacan	3,554	2,945
Iloilo			Rizal		
Surigao			Cavite		
Capiz			Camarines		
Antique			Pangasinan		
Misamis			Leyte		
Masbate			Batangas		
February:			Laguna		
Camarines			Samar		
Pampanga			Cebu		
Nueva Ecija			Ilocos Norte		
Leyte			Sorsogon		
Batangas			Bohol		
			Albay		

Table showing, by months, the provinces infected by cholera, with the total number of cases and deaths during each month—Continued.

Month, year, and provinces.	Cases.	Deaths.	Month, year, and provinces.	Cases.	Deaths.
1903—Continued.			1903—Continued.		
June—Continued.			September—Continued.		
Negros Occidental			Union		
Iloilo			Cebu		
Capiz			Ilocos Norte		
Misamis			Bohol		
Masbate			Negros Occidental		
Cagayan			Iloilo		
Romblon			Surigao		
Isabela			Capiz		
July:			Antique		
Bulacan			Misamis		
Rizal			Cagayan		
Cavite			Isabela		
Camarines			October:		
Pangasinan			Bulacan		
Tarlac			Rizal		
Nueva Ecija			Cavite		
Leyte			Bataan		
Batangas			Camarines		
Laguna			Tarlac		
Zambales			Nueva Ecija		
Union			Leyte		
Cebu	4, 167	2, 806	Batangas		
Ilocos Norte			Laguna		
Bohol			Tayabas		
Albay			Zambales	2, 531	1, 969
Negros Occidental			Union		
Iloilo			Ilocos Sur		
Surigao			Cebu		
Capiz			Bohol		
Antique			Negros Occidental		
Misamis			Iloilo		
Masbate			Surigao		
Cagayan			Capiz		
Nueva Vizcaya			Antique		
August:			Cagayan		
Bulacan			Isabela		
Rizal			November:		
Cavite			Bulacan		
Bataan			Rizal		
Camarines			Cavite		
Pampanga			Bataan		
Pangasinan			Camarines		
Tarlac			Tarlac		
Nueva Ecija			Nueva Ecija		
Leyte			Ilocos Sur	1, 119	937
Batangas			Cebu		
Laguna			Bohol		
Samar			Negros Occidental		
Mindoro			Iloilo		
Tayabas			Surigao		
Marinduque	10, 212	7, 406	Capiz		
Zambales			Antique		
Union			December:		
Ilocos Sur			Bulacan		
Cebu			Rizal		
Ilocos Norte			Cavite		
Sorsogon			Bataan		
Bohol			Tarlac		
Albay			Nueva Ecija		
Negros Occidental			Ilocos Sur	364	270
Iloilo			Bohol		
Benguet			Negros Occidental		
Antique			Iloilo		
Misamis			Capiz		
Masbate			Antique		
Cagayan					
September:			1904.		
Bulacan			January:		
Rizal			Nueva Ecija		
Cavite			Cebu	35	24
Bataan			Negros Occidental		
Pangasinan			February:		
Tarlac			Negros Occidental	61	42
Nueva Ecija			Iloilo		
Leyte			March:		
Batangas			Cebu	23	10
Laguna			Capiz		
Marinduque			April:		
Zambales	4, 613	3, 672	Not stated	1	0

CRITICISM OF THE 1902 CHOLERA CAMPAIGN.

During the period from March 20 to July 31, 1902, the campaign against cholera in Manila was under the immediate control of Maj. Louis M. Maus, of the United States Army Medical Corps, who was President of the Board of Health and Commissioner of Public Health for the Philippine Islands.

However, the Commissioner of Health was under my control and the plan of campaign followed by him was adopted with my knowledge and approval. In criticising it I am, therefore, in many instances, criticising myself as well as him and shall endeavor to assume my full share of responsibility for the undoubted mistakes which were made.

The most serious blunder was the attempt to establish a land quarantine around the city of Manila for the protection of the neighboring provinces. This effort resulted in imposing serious and useless annoyance upon a very large number of persons and was entirely futile. It would have taken a good-sized army of soldiers to make it really effective, and even then cholera victims would probably have been smuggled out of the city by water at night.

At the outset the cases seemed to be strictly confined to the Farola district, a small triangular area at the mouth of the Pasig River, bounded by that stream, by Manila Bay, and by an estero or canal connecting the river with the bay. As soon as it became apparent that the disease was localized there I suggested that this district, which was covered for the most part with filthy and almost worthless shacks, be burned over and that its inhabitants be transferred to the detention camp. The Commissioner of Health deemed it sufficient to guard it with a view to preventing the escape of any of its inhabitants, removing the sick to the cholera hospital and the "contacts" to the detention camp. On the second day I renewed my suggestion with emphasis, and on the third day embodied it in the form of a specific verbal order. This order was carried out, but unfortunately the guard had proved insufficient to prevent the escape of a number of persons actually sickening with cholera who had scattered through the city and now began to start new foci of infection. I am of the opinion that if all the inhabitants of the Farola district had been removed at the outset to the detention camp and the district swept by fire and then drenched with disinfectants, the epidemic of 1902-1904 might have been avoided.

As it was, the detention camps at San Lazaro and Santa Mesa accomplished no good at all commensurate to the expense involved in

their maintenance and the popular prejudice produced by transferring to them the supposed cholera "contacts."

The nipa barracks of the San Lazaro camp were barely completed when the epidemic broke out, and had not been furnished. It was necessary to equip them very hastily and at the same time to provide commissary facilities for a large number of people, and as a result the persons first sent to this camp suffered some material discomfort which added to the prejudice against the Board of Health.

The tent hospital on the San Lazaro grounds was located in a shady place and served its purpose fairly well but the one at Santa Mesa was exposed to the blazing sun, and a tent hospital maintained under such climatic conditions as prevail in the lowlands of the Philippines is at best a very unsatisfactory affair. It would have been far wiser to secure at the outset a suitable building, like the convento ultimately occupied on Calle Herran.

The cremating of so many of the dead, while from a strictly sanitary point of view an admirable method of disposing of them, provoked much hostility and was, under the circumstances, a mistake.

There was at the outset altogether too much destruction of property. Thorough disinfection should have taken the place of much of the burning that was indulged in.

Some abuses were perpetrated by sanitary inspectors and disinfectors. The guilty were severely punished whenever detected. It is doubtless true that not a few of them escaped detection but the responsibility for this must rest upon those who failed to make complaint rather than on the Commissioner of Public Health, who caused all complaints to be investigated promptly.

On the 27th of April, 1904, the Board of Health passed the following resolution:

Whereas cases of Asiatic cholera have occurred in but three provincial towns of the Philippine Islands since February 8, 1904; and

Whereas only one case of Asiatic cholera has been reported as occurring at any place in the Philippine Islands since March 8, 1904; and

Whereas the city of Manila was declared on March 23 to be free from the infection of Asiatic cholera: On motion

Resolved, That the islands composing the Philippine Archipelago are, and are hereby declared to be, free from the infection of Asiatic cholera; and

Be it further resolved, That the Commissioner of Public Health be directed to send a copy of these resolutions to the honorable the Secretary of the Interior, the Municipal Board, the United States Marine-Hospital Service, and the Collector of Customs.

The following table shows the order in which the provinces became infected and the prevalence of the disease in each:

Province.	First case.	Last case.	Total cases.	Deaths.
Rizal	Mar. 23, 1902	Dec. 3, 1903	1,263	760
Bulacan	do	Dec. —, 1903	1,823	1,363
Cavite	Mar. 27, 1902	do	876	634
Bataan	Mar. 28, 1902	do	1,267	917
Camarines	Mar. 30, 1902	Nov. —, 1903	1,403	1,045
Pampanga	Apr. 6, 1902	Aug. —, 1903	1,209	860
Pangasinan	Apr. 20, 1902	Sept. —, 1903	7,771	5,478
Tarlac	Apr. 28, 1902	Dec. —, 1903	986	718
Nueva Ecija	May 8, 1902	Jan. —, 1904	1,905	1,514
Leyte	May 9, 1902	Oct. —, 1903	1,445	1,098
Batangas	May 20, 1902	do	3,433	2,718
La Laguna	May 23, 1902	do	2,981	2,399
Samar	May 29, 1902	Aug. —, 1903	1,391	1,345
Mindoro	June 10, 1902	do	308	279
Tayabas	June 13, 1902	Oct. —, 1903	376	246
Marinduque	July 1, 1902	Sept. —, 1903	608	532
Zambales	July 3, 1902	Oct. —, 1903	2,161	1,412
La Union	July 6, 1902	do	3,874	2,883
South Ilocos	July 9, 1902	Dec. —, 1903	1,584	1,067
Cebu	July 14, 1902	Mar. —, 1904	14,210	9,983
North Ilocos	July 24, 1902	Sept. —, 1903	1,694	1,228
Sorsogon	do	Mar. —, 1903	542	255
Bohol	July 29, 1902	Dec. —, 1903	2,706	1,877
Albay	Aug. 15, 1902	do	1,142	1,049
Occidental Negros	Aug. 18, 1902	Feb. —, 1904	8,564	2,553
Iloilo	Aug. 24, 1902	do	26,427	19,095
Benguet (cholera got among the wild people of Benguet and the number of cases is not known)			1	1
Surigao	Sept. 5, 1902	Nov. —, 1903	1,022	749
Capiz	Sept. 8, 1902	Mar. —, 1904	4,650	3,016
Oriental Negros	Sept. 29, 1902	Apr. —, 1903	1,136	861
Romblon	Sept. 30, 1902	June —, 1903	200	74
Antique	Oct. 2, 1902	Dec. —, 1903	2,485	1,798
Misamis	do	Sept. —, 1903	4,621	2,477
Masbate	do	Aug. —, 1903	497	291
Cagayan	Apr. —, 1903	Oct. —, 1903	980	672
Nueva Vizcaya	July —, 1903	July —, 1903	1	1
Isabela	Sept. —, 1903	Oct. —, 1903	82	48
Miscellaneous			53,047	31,784

The total number of cases in the provinces was 160,671 and the total population for the infected provinces was 6,872,309, giving for the provinces infected one case to each 42.7 inhabitants, as compared to one case for each 45 inhabitants in Manila.

It will be noted that cholera reached every province in the Islands except Abra, Lepanto-Bontoc, and Palawan. Abra, Lepanto-Bontoc, and Nueva Vizcaya (which had but a single case) all escaped when cholera was raging in neighboring provinces on account of their isolated position, which made it possible to maintain a *thoroughly effective* land quarantine on the few trails by which alone they could be reached.

Palawan, on account of its isolated position, also escaped.

In Benguet the disease worked up the partially completed road to Camp Five and from there was scattered through the province by escaping Igorot carriers. As the people of this province were almost entirely non-Christians and as there was no health service among them, the number of cases and deaths was not ascertainable but it is known to have been considerable.

In most cases the presidents of provincial boards of health showed themselves entirely incapable of coping with cholera during this epidemic. Whenever thoroughly trained men could be spared from Manila they were sent to assist them, and demonstrated over and over again the quickness and certainty with which a provincial town may be rid of cholera by the local officials when working under competent direction. In case after case American medical inspectors went into towns where the deaths were running from 50 to 75 per day upon their arrival and within a week or two stamped out the disease completely. But the supply of such competent medical officers was wholly insufficient to meet the demand in the provinces, where as a rule matters were of necessity left entirely in the hands of the provincial and municipal boards of health. The epidemic finally wore itself out, ending quite suddenly.

THE EPIDEMIC OF 1905.

After a respite of nearly fourteen months, cholera, which had disappeared in Manila on April 27, 1904, reappeared on August 23, 1905. In this instance there was no evidence that the disease was brought to the Philippines from any foreign country; on the contrary, like the epidemic of 1888, it appears to have originated in the vicinity of Taytay, Jalajala, and other towns on the Laguna de Bay. For several weeks prior to the outbreak there occurred at Manila a number of suspicious cases which clinically resembled cholera, but this diagnosis could not be confirmed bacteriologically. On August 23 the first typical case developed and curiously enough it occurred in Bilibid prison. Of this occurrence the Commissioner of Health said:

"A case in an institution which is practically cut off from the remainder of the world; where all foodstuffs are permitted to enter only after the most rigid inspection; where all food served that could likely convey cholera is cooked at all times, and, on account of dysentery, it is said that all drinking water was sterilized; it would seem that the routine precautions thus taken should also have afforded protection against the cholera. The commencement of an outbreak in this insidious manner was most puzzling to the sanitary authorities, and the prospects of combating a disease whose origin was so obscure were not encouraging."

Later it was certainly shown that the disease had appeared at Jalajala on the Laguna de Bay, Province of Rizal, on August 20, while there was strong presumptive reason for believing that it had occurred at Taytay and several other lake towns on or before this date, and through the fault of local health officers had remained unreported.

On August 25 an American woman residing at the Grand Hotel in the Walled City was attacked and on the same day an American man residing in a section of the city nearly 2 miles from this place was also attacked.

No connection could be traced between these two cases nor could any history be obtained showing that the same articles of food likely to convey infection had been eaten by these two victims.

At the end of the second week, beginning August 23, there had been 137 cases, as compared with 125 for the same period during the epidemic of 1902-1904.

However, the conditions for combating cholera were now far more favorable than in 1902. Maj. E. C. Carter, who succeeded Major Maus, had at his own request been relieved from duty as Commissioner of Public Health and Dr. Victor G. Heiser, passed assistant surgeon of the U. S. Public Health and Marine-Hospital Service, had been appointed to succeed him on April 5, 1905. Dr. Heiser was a highly trained officer of one of the most efficient services which has ever been organized for the combating of contagious and infectious diseases.

He had under him in the city of Manila a small but thoroughly trained body of 24 medical inspectors, of whom 19 were Americans and 5 were Filipinos. Profiting by his previous experience and that of his predecessors in the Philippine service, he inaugurated a campaign which practically terminated the epidemic in Manila on February 21, 1906 (there was one stray case in March), with a total of 283 cases and 243 deaths.

Table showing the cases and deaths from cholera in Manila during the epidemic of 1905:

Month and year.	Cases.	Deaths.
August, 1905.....	51	46
September, 1905.....	147	126
October, 1905.....	31	29
November, 1905.....	18	17
December, 1905.....	3	8
January, 1906.....	12	12
February, 1906.....	15	4
March, 1906.....	1	1
Total.....	278	243

The first case occurred on August 23, 1905, and the last case on March 21, 1906, and between February 21, 1906, and May 8, 1906, there was but one case.

This brief and decisive campaign reflects the greatest credit on all concerned with it.

The Board of Health had one great advantage in the fact that the San Lazaro contagious disease hospital had been completed. This building with its cool wards and attractive surroundings made it possible to give cholera victims the best of care. The methods followed in this institution are fully given in a letter hereinafter quoted. (See p. 31.)

While the disinfection carried out under the direction of Dr. Heiser was very thorough, it was conducted in such a way as to impose a minimum of inconvenience and property loss on private individuals.

VICIOUS ATTITUDE OF A PORTION OF THE PUBLIC PRESS.

There was at the outset little or no fear of the hospital, but apparently this condition of things was not satisfactory to that small but dangerous element of the Manila public which from the time of American occupation has never let pass any opportunity to make trouble. As usual, the medium of attack was the local press. "Soberanía Nacional" published a most extraordinary article painting in vivid colors the alleged horrors of the San Lazaro Hospital and stating among other things *that the naked bodies of the dead, tagged and with the feet tied together, lay about the entrance of that institution.* A more viciously false statement was never published.

Within twenty-four hours after its appearance terror reigned among the lower classes, and living and dead cholera victims were being smuggled out of the city to neighboring provincial towns.

I sent the editor of this paper a courteous invitation to call at my office, believing that he must have been misled by some wild canard. He made no response.

The following correspondence ensued:

To the EDITOR OF EL SOBERANÍA NACIONAL,

Manila, P. I.

SIR: In your issue of the 7th of July there appeared a paragraph embodying a shameful libel on the administration of the San Lazaro Hospital, which reads as follows:

"Un cuadro verdaderamente aterrador es el que presenta el patio del Hospital de San Lazaro. Los fallecidos por la enfermedad del colera, son expuestos desnudos en el atrio de dicho Hospital con un cartel atado en los pies con la inscripción de sus respectivos nombres."

This statement was so grossly and ridiculously false and at the same time so extremely harmful in its effect as to bring you fairly and squarely within the reach of the law.

Yesterday morning I sent you a courteous letter requesting you to come to my office, purposing to discuss the affair with you in a friendly manner, and hoping to find that the statement referred to had been prepared by some irresponsible subordinate and published through oversight.

As, however, you have neither acceded to my request for a conference nor had the courtesy to reply to my letter, I now have the honor to forward you herewith a communication which embodies a reply to the false statement above referred to and at the same time conveys information as to what is actually being done at the San Lazaro Hospital. I request that you give this letter immediate publicity through your paper, and in the editorial columns or elsewhere in some conspicuous place retract immediately and fully the libelous statement relative to the exposure of the dead, above referred to.

Kindly advise me of your intention in the matter. The bearer of this communication has instructions to wait for your reply. I shall interpret failure to hear from you by return messenger as refusal to retract this slander and to publish the enclosed communication, and shall act accordingly.

Very respectfully,

DEAN C. WORCESTER,
Secretary of the Interior.

[*Soberania Nacional* and *Kapangyarihan ng Bayan*, Independent Philippine newspaper.]

Mr. DEAN C. WORCESTER,

Secretary of the Interior, Manila, P. I.

SIR: I have the honor to acknowledge the receipt of your letter dated the 12th instant, and in doing so, I take pleasure in informing you that the letter to which you refer has unfortunately not reached me.

I am very sorry that a lack of courtesy has been attributed to me because of no reply from me having been received; but in view of my not having learned of the existence of this letter for me, I was hardly able to guess what you told me in the same, and I therefore protest against the charge of discourtesy made in your letter.

I am the first to desire that matters of the sort which gave rise to our report of the 7th of July should be taken up with the authorities in a friendly manner, because I believe that this is the most efficacious means of correcting iniquities or of ascertaining the real truth of the matters.

This is the first time that I receive an authorized rectification of what we published in our edition of the 7th instant, and I shall take great pleasure in publishing the same in our edition of to-day.

When I brought to the knowledge of the public that which our service of information had furnished to us, on the 7th of July, it was not my intention to hold up the managers of the San Lázaro Hospital to ridicule before the public, but merely to give a signal of alarm to the authorities, in order that a remedy be immediately provided, in the event of it being true, by the authorities concerned, and for the best of the people, as the Government does not spare any sacrifice for the latter.

I wish to make it known by these presents that our object in publicly commenting upon or denouncing the news received by us is not to defame the government or certain persons, but to redeem our pledge toward the people that we would work for its welfare. To prove this assertion, I should like to have you read what we published on the 11th of July, 1906, under the heading "A visit to the San Lázaro Hospital."

We desire the truth, and to this we consecrate all our energy, even though it be necessary to make sacrifices.

I am convinced that under the protection of the principles which exalt the American people, the Filipino may communicate to his representatives in these Islands, through the press, all that is liable to redound to the detriment of both peoples.

Lastly I will state that in compliance with your request, and in honor of the truth, I shall publish the letter which I am now answering at a prominent place in our edition of to-day, but this does not mean that we shall not publish everything sent to us in refutation thereof.

Very respectfully,

PEDRO GUEVARA, *Manager.*

Señor PEDRO GUEVARA,

Director, "Soberania Nacional," Manila, P. I.

SIR: I have the honor to acknowledge receipt of your letter of July 12, 1906. Referring to your statement that you did not receive my letter of the 10th instant, I have the honor to advise you that I hold the receipt of Señor Hugo Manás, for the same.

I note that you will publish my letter of the 11th instant, as requested, in your issue of to-day.

I also note that you have ignored my query as to whether or not you would

publish in a conspicuous place in your paper a retraction of a statement referred to in that letter which reads as follows:

"Un cuadro verdaderamente aterrador es el que presenta el patio del Hospital de San Lázaro. Los fallecidos por la enfermedad del cólera son expuestos desnudos en el atrio de dicho Hospital con un cartel atado en los pies con la inscripción de sus respectivos nombres."

This statement is an infamous libel. I do not desire to discuss with you your motives in publishing it. It embodies a positive statement which is unqualifiedly false.

I have read the articles referred to, in your issue of July 11, and do not find that either in this article or anywhere else in your paper you have ever retracted this statement. You must retract it fully and completely and apologize for having published it. Your retraction must be given a conspicuous heading and placed in a conspicuous part of your paper, in your issue of to-morrow, so that it can not escape the attention of any reader.

I regret to be forced to state matters thus plainly, but your action in completely ignoring my request for information as to whether you would or would not retract this article leaves me no other course. By its publication you have done incalculable harm. The least that you can now do is to publish an explicit denial in the form above specified.

I presume that I need hardly suggest to you that the alternative is immediate criminal prosecution upon a serious charge.

Kindly advise me of your decision in the matter by this messenger, who is instructed to await your reply.

Very respectfully,

DEAN C. WORCESTER,
Secretary of the Interior.

In response to this communication, there appeared in *Soberania Nacional* the following:

We are exceedingly glad to affirm in the honor of truth and justice, that the news given by us on the seventh instant under the title "Painful Scenes," and "Naked Dead," is absolutely absurd, false and unreasonable.

We have investigated the truth of the said notice, and can affirm to our readers that it is entirely inaccurate, as in the courtyard of the said hospital the naked dead that we have spoken of are not now exposed, nor have they ever been so exposed.

The truth is above all things, and to rectify a baseless piece of news should not be a doubtful action on the part of the person who gave the news, but rather something in his favor that the public should appreciate at its full value.

To conclude, we must record our gratitude to the Secretary of the Interior, the Hon. Dean C. Worcester, for the investigations made in the premises with the purpose of ascertaining the truth of the alleged facts, and for the courteous way in which he received us this morning when interviewed by one of our reporters.

Letter which the editor of *Soberanía Nacional* was required to publish:

THE TRUTH ABOUT THE GOVERNMENT CHOLERA HOSPITAL.

To the EDITOR, *SOBERANIA NACIONAL*, Manila, P. I.

SIR: I beg leave to call your attention, and through your valuable paper, the attention of your readers, to the statement which appeared in your issue of Saturday, July 7, under the heading "Escenas Dolorosas." I take it for granted that the statement referred to did not come to your notice before publication or

you would hardly have allowed it to appear in your columns without investigation, and the most superficial examination would have showed it to be utterly false.

The following is the statement referred to:

"A truly terrifying sight presents itself at the doorway of the hospital of San Lazaro. Those who have died of cholera are exposed naked, in the hospital square, each with a ticket tied to his feet, bearing the name of the dead person."

Nothing could be more untrue or more fantastically absurd. No dead person was ever, under any circumstances, exposed naked in the "atrio" of this hospital, nor in the wards, nor in the passages leading to the wards, nor in any other place connected with the hospital, under any circumstances whatsoever. Even where it is necessary to expose portions of the bodies of the living in treating them or bathing them, their beds are shut in by screens.

It is difficult to understand how such a statement could have crept into your journal. The cholera hospital is a public place. It is visited at frequent intervals, not only by myself and by the Director of Health, but by reputable Spanish and Filipino physicians, by high dignitaries of the Holy Roman Catholic Church, and by the immediate relatives of the sick. Such a horrible condition of affairs as the author of the statement referred to has represented to exist there would not be tolerated for an instant by the authorities of the Government, much less would it be endured in silence by physicians not connected with the Government, by representatives of the church, or by relatives of the inmates, to say nothing of the four American ladies constantly employed there as nurses, every one of whom would doubtless instantly leave the place were there any needless exposure of the bodies of the living or the dead.

In point of fact, those who die in the hospital are immediately removed, decently covered, in a closed vehicle to the morgue.

In view of the extremely important part played in protecting the health of Manila by this hospital which is doubtless not fully appreciated by many of your readers, it is greatly to be regretted that a statement of this sort, which can not fail to cause great alarm and deep distress to many worthy people, should appear just at a time when the reappearance in Manila of cholera, unfortunately of very malignant type, renders of utmost importance the hearty coöperation of all who are genuinely interested in promoting the welfare of the Filipino people. I take it for granted that you will be glad to do what you can to repair the damage already done by aiding in making known to the public the truth about this institution which has done in the past, and will do in the future, such valuable and humane work.

The cholera hospital is anything but the doleful place it has been represented to be. It is surrounded by beautifully kept grounds; all parts of the buildings, including the wards, are immaculately clean; wide porches keep the direct ray of the sun away from the windows; the type of construction, which is on the pavilion plan, admits air from all four points of the compass to each of the three buildings which are connected with each other and with the administration building by wide, roofed walks that afford an admirable place for the convalescent to get the benefit of the cool breezes and open air without exposure to the rays of the sun.

A thoroughly trained American physician and an adequate number of highly trained American ladies, who act as nurses, are on hand night and day, but any person received at the hospital is at perfect liberty to summon his own physician, and in the event that he does so the prescriptions which such physician writes are accurately filled at Government expense and the régime which he prescribes for the patient is strictly carried out.

In the event, as often happens, that a patient is a Filipino and has no family

physician, but prefers to be treated by a Filipino doctor, he may enjoy this privilege instantly, as a competent Filipino physician, employed at the expense of the Insular Government, is always on duty.

Nor do the sick lack the consolations of the church. The kindly interest taken by His Grace, the Archbishop of Manila, in the people of his diocese is too well known for it to be possible for any one to believe that he would for a moment forget the sick, and priests are constantly at hand to give to the sick and dying the consolations of the Church.

The utmost care is given to that most important matter, the preparation of the food of the convalescents, and neither trouble nor expense are spared in making it as suitable as possible.

If any person can suggest practical means of increasing the comfort of the sick or improving their chances of recovery, he will confer a great favor upon the Director of Health and upon myself by so doing; but in view of the fact that under the present arrangement the inmates may employ their own physicians and have the régime prescribed by such physicians strictly carried out, or may have the services of either the Filipino or the American physician employed by the Insular Government free of charge, and taking into account the ceaseless and excellent care given patients by the nurses, the character of the food furnished, and the admirable sanitary condition of the whole institution, it is difficult to see how more could be done for the unfortunate victims of this terrible disease than is being done at the present time.

And what are the results? Very far from those represented. Complete figures to date are not available, but from the beginning of the present epidemic (August 23, 1905) to the date of my last annual report, for instance, there were 178 cases of cholera in the city of Manila. Of this number 83 were taken to the hospital and 95 remained at their homes throughout the course of their disease. Of the 95 who remained at their homes 95 died, a mortality of 100 per cent. Out of the 83 persons taken to the hospital, many of whom were in a dying condition when received there, 63 died, a mortality of 75.9 per cent. Since the last cholera outbreak in the city of Manila, on June 20, 78 persons were taken to the hospital, of whom 57 died, a mortality of 80.1 per cent. Of the 101 known cases not taken to the hospital during this same period 101 have died, a mortality of 100 per cent.

It is a hard fact, and a fact which the newspapers of Manila ought to make known to the public, that cholera patients taken to the cholera hospital have far more chance of recovery than have those treated in their homes, and this is due to the existence at the hospital of extraordinary facilities for treating them, facilities which can not be duplicated in any private residence.

In these days one often sees applied to the present policy of the health authorities the expression "compulsory hospitalization." This expression is misleading. From it one would suppose that every person smitten with cholera was forced to go to the Government hospital, but this is far from being the case.

It is for the Director of Health and his duly authorized agents to decide in each instance whether the local conditions are such that the patient may safely be treated at home, or are such that it is necessary, in order properly to safeguard the health of the community at large, to take him to the hospital. The unquestionable fact that the patient's chances of life will, on the average, be increased by his removal to a place where he may have the best of care, while an important consideration, is not the determining factor. We might and doubtless should hold that so far as his own life is concerned the responsibility rests upon him, and were there no other considerations his individual preference would be determining. Even now his individual rights are respected by allowing

him to select his own physician whether that physician be the most competent or the most incompetent representative of the medical profession in the city of Manila, and to have the remedies which that physician prescribes irrespective of whether they are or are not the most suitable remedies in his case.

Unfortunately, however, cholera spreads from person to person with a rapidity not displayed by any other disease. The ways in which it may be transmitted are so numerous and the precautions necessary to prevent its spread from a case in an ordinary household are so difficult of enforcement in private homes as to make the checking of an epidemic, with any possible number of health officers and employees, an utter impossibility if the majority of patients were to be cared for in their houses. Where patients can be cared for at their homes by their own physicians without endangering the lives of others, the Government has nothing to lose and everything to gain by allowing them to remain there. Where they can not be safely cared for at home, by their removal to the hospital not only are their individual chances for recovery increased but the danger of spreading the disease is absolutely eliminated. Proper consideration for the *greatest good of the greatest number*, which must always be the guiding principle in sanitary work, would in itself make it imperative that they should be so removed.

[The fear of hospitals so general in countries with a Latin civilization is a difficult thing for Englishmen, Germans, or Americans to comprehend, for in England, Germany, and America there exist immense numbers of these beneficent institutions, offering facilities for the medical and surgical treatment of disease which can not be had even in the private homes of the immensely wealthy. In these countries rich and poor alike have very generally come to understand that when smitten by deadly diseases or when obliged to undergo critical surgical operations the hospital offers them the greatest hope of continued life and restored usefulness. They go there voluntarily, and thank God for the opportunity.

It would be too much to expect that so profound a change in public sentiment would come about in a short time in the Philippine Islands. It is sure to prevail ultimately. The question is not one as to whether it shall ultimately prevail, *but rather as to whether its coming shall be delayed for a longer or a shorter time.*

When the word first spread that the Government would establish a leper colony on the island of Culion the news created great alarm among sufferers from this terrible disease, but when the first unfortunates had been transferred to the leper colony and saw what had been done for them, their feelings underwent a complete change and they said that if they had known in advance what lay before them, instead of objecting to being removed to Culion they would have petitioned to be taken there as soon as possible.

Similarly in the case of the cholera hospital, the best friends of the institution are those whose lives have been saved there. Were I myself smitten with the disease I should go to the hospital with the least possible delay, and so I believe would every intelligent and well-informed person who has taken the trouble to visit the institution and see for himself what are the conditions that prevail there.

It should be remembered that the hospital is a public institution and as such may be inspected at any proper time by any person who has an adequate reason for desiring to go there. A representative of your paper has been invited to inspect it at any time and see for himself what the conditions are. I take it for granted that such representative will be sent by you and that you will be glad to make public the conditions found.

Very respectfully,

DEAN C. WORCESTER,
Secretary of the Interior.

Representatives of the entire press of Manila were invited to visit the San Lazaro Hospital, which in point of fact they might have done at any time, and with a single exception the papers published truthful and more or less full accounts of what they saw. The remaining newspaper was unwilling to do good by publishing the truth, so published nothing.

Many of the newspapers printed in Spanish seemed to have learned for the first time on this occasion what should have been well known to them, namely, that cholera victims were allowed to have the services of any physician whom they desired and that a Filipino physician was employed by the Government to attend those who desired medical assistance from one of their own race but could not afford to pay a doctor.

The only criticism of importance which appeared in the press as a result of this visit of reporters was that the Filipino doctor had a course of treatment laid down for him in general terms, and that he was not entirely at liberty to follow his own judgment in the matter. This was strictly true, the general lines of the treatment which gave the best results having long before been ascertained and laid down, the necessary variations to adapt it to individual peculiarities being, of course, duly allowed for.

FILIPINO PHYSICIAN APPOINTED TO SAN LAZARO.

I offered control of the treatment of all Filipinos at the hospital to two of the most distinguished Filipino physicians in this city, retaining an American physician for those who might prefer his services. These gentlemen kindly accepted appointment.

Orders were given that all their prescriptions should be filled without question and that all orders issued by them as to the treatment of patients should be carried out to the letter. At the outset they introduced some important variations in treatment but the resulting death rate was apparently not satisfactory to them. At all events, they gradually changed their treatment until it became practically identical with that which had been employed prior to their taking charge, the death rate falling, simultaneously, to substantially its previous figure.

There followed a demand in the Spanish and Filipino press that the *entire* personnel of the hospital should be Filipino. Dr. Heiser immediately informed the physicians in charge of his willingness immediately to relieve all the American trained nurses and attendants, who were badly needed elsewhere, and to appoint the Filipino substitutes whom they should name, *but for some reason those gentlemen, on whom the responsibility for results now rested, did not adopt the view of this matter which had been set forth in the Filipino press, but on the contrary vigorously objected to the suggested change in the force.* The organization was accordingly left undisturbed.

The Filipino physicians continued to serve faithfully until near the end of the epidemic. Their presence at the hospital undoubtedly went far

toward allaying the ill-founded fears which had been aroused in the minds of the ignorant and I have always felt deeply indebted to them for sacrificing their private interests and coming to the assistance of the Bureau of Health at this critical time.

This is only one of numerous instances which might be cited of the vicious influence of a part of the public press of Manila. This influence has been and, I regret to say, still remains one of the most serious difficulties which confronts the officials responsible for the sanitary condition of the city. These men are ridiculed, slandered, and libeled from the beginning of an epidemic to its end. If cholera appears in the city they are blamed for its occurrence. If it does not appear they get no credit for keeping it out. If they attempt to establish a land quarantine they are cursed for needless and useless interference with business interests. If they deem such quarantine inadvisable and fail to impose it they are charged with criminally neglecting to enforce the necessary measures for safeguarding the public health. No matter how competent or successful they may be, the measures which they adopt are constantly attacked and they themselves are continually accused of being grossly incompetent. All of this has a deplorable effect on the more ignorant Filipinos, who fail to realize that it is only politics.

During the present epidemic, for instance, the little handful of highly trained medical inspectors in Manila, under the able leadership of the Acting Director of Health, have made a most extraordinarily successful campaign. To any one familiar with existing sanitary conditions in Manila, many of which, by the way, the Bureau of Health is absolutely without authority to remedy, it seems almost unbelievable that the maximum number of cases for any one day should have been held down to sixty, yet certain newspapers printed in the Spanish language have been howling for the removal of the Acting Director of Health *because of his incompetence!*

Mistakes can be remedied and abuses corrected if brought to the attention of the proper authorities, and newspapers or individuals who bring to the attention of such authorities the mistakes and shortcomings of officers or employees of the Bureau of Health confer a favor and aid in the work of safeguarding the public health; but newspapers or individuals that misrepresent the facts and persistently endeavor to discredit faithful and efficient employees of the Government, and circulate lying tales calculated to alarm the ignorant and superstitious, leading them to hide away their sick, thus preventing them from receiving medical attention which might save their lives and insuring unnecessary dissemination of infection which endangers the lives of others, are guilty of homicide on a very large scale and should be dealt with accordingly.

SUBSEQUENT EPIDEMICS IN THE PROVINCES.

In the provinces the story was a far less satisfactory one.

No attempt was made to establish a land quarantine about Manila, and every energy was concentrated for a direct attack upon the infection, but the lack of adequate personnel was woefully evident from the start. An effective marine quarantine was maintained, and the disease was for a long time kept within a radius of 75 miles of Manila, largely through the effective work of worn-out men sent from Manila even while still needed there. The disease spread to the north along the line of the railway and to the east as far as the Province of La Laguna and thence south by way of a newly constructed highway to Lucena and Pagbilao in the Province of Tayabas. The latter town is the point of departure for a road which extends across Luzon to Atimonan on the Pacific coast and is also a port of departure for numerous small vessels, so that for a time there was great danger of a general epidemic, but a very determined and successful effort was made to check cholera at Pagbilao.

Dr. José Mascuñana, the president of the provincial board of health of Tayabas, had incurred the ill will of the inhabitants, who stubbornly refused to obey his orders. Two of the best men in the service, Dr. John D. Long and Dr. Vicente de Jesus, were hurried to the scene, Dr. Long taking charge.

These men had the active and cordial assistance of Governor Quezon. Dr. Jesus immediately secured the confidence of the people, who cheerfully followed his directions, and the disease was completely and promptly stamped out in Pagbilao and immediately thereafter in the towns along the route it had followed in invading the Province of Tayabas.

The result in this instance shows conclusively what may be done toward checking cholera, under adverse circumstances, if the work is in the hands of capable and energetic men who are able to secure a reasonable degree of coöperation from the people. A pleasant feature of this case was that each of the three men who contributed to bringing about a most satisfactory issue gave all of the credit to the other two.

The following table shows in summary form the course of cholera in the provinces by months from August 20, 1905, to date:

Month and provinces.	Cases.	Deaths.	Month and provinces.	Cases.	Deaths.
1905.			1905—Continued.		
August:			November:		
Rizal.....	775	63	Rizal.....	483	339
Cavite.....			Cavite.....		
September:			Pampanga.....		
Rizal.....	334	252	Bulacan.....		
Cavite.....			La Laguna.....		
Pampanga.....			Tayabas.....		
Bulacan.....			Batangas.....		
La Laguna.....			December:		
October:			Rizal.....	387	209
Rizal.....	358	249	Cavite.....		
Cavite.....			Pampanga.....		
La Laguna.....			Bulacan.....		
Tayabas.....			La Laguna.....		
			Batangas.....		

Month and provinces.	Cases.	Deaths.	Month and provinces.	Cases.	Deaths.
1906.			1906—Continued.		
January:			October—Continued.		
Rizal	1,106	809	Tayabas	558	637
Cavite			Tarlac		
Pampanga			Nueva Ecija		
Bulacan			Pangasinan		
La Laguna			Iloilo		
Bataan			November:		
Tarlac			Rizal	60	41
Nueva Ecija			Pampanga		
February:			Tarlac		
Rizal	1,845	1,417	Nueva Ecija		
Cavite			Iloilo		
Pampanga			Occidental Negros	100	56
Bulacan			Capiz		
La Laguna			Moro		
Bataan			December:		
Tarlac			Rizal	124	86
Nueva Ecija			Cavite		
March:			Occidental Negros		
Cavite	288	225	Capiz		
Pampanga			January:		
Bulacan			Occidental Negros	100	56
La Laguna			Capiz		
Bataan			Samar		
April:			February:		
Rizal	56	48	Occidental Negros	124	86
Cavite			Capiz		
Pampanga			Samar		
Bulacan			March:		
Bataan			Occidental Negros	27	17
May:			Capiz		
Rizal	44	33	Samar		
Cavite			April: Occidental Negros	15	13
Pampanga			May	0	0
Bulacan			June	0	0
Bataan			July: Leyte	7	7
June:			August:		
Rizal	265	155	Leyte	101	92
Cavite			Masbate		
Pampanga			September:		
Bulacan			Leyte	40	29
La Laguna			Masbate		
July:			October:		
Rizal	2,145	1,541	Bulacan	6	5
Cavite			Masbate		
Pampanga			November:		
Bulacan			Pampanga	118	105
La Laguna			Bulacan		
Tayabas			December:		
Tarlac			Rizal	206	143
Nueva Ecija			Pampanga		
Pangasinan			Bulacan		
August:			Batangas		
Rizal	2,045	1,585	1907.		
Cavite			January:		
Pampanga			Rizal	513	402
Bulacan			Cavite		
La Laguna			Pangasinan		
Tayabas			Zambales		
Batangas			La Laguna		
Bataan			Bataan	203	155
Tarlac			February:		
Nueva Ecija			Rizal		
Pangasinan			Cavite		
Benguet			Pampanga		
September:			Bulacan	90	71
Rizal	777	625	Bataan		
Cavite			Pangasinan		
Pampanga			Zambales		
Bulacan			March:		
La Laguna			Rizal	90	71
Tayabas			Pampanga		
Tarlac			Tarlac		
Nueva Ecija			Pangasinan		
Pangasinan			Zambales		
Iloilo			Mindoro		
October:					
Rizal	1,234	903			
Cavite					
Pampanga					
Bulacan					
La Laguna					

Month and provinces.	Cases.	Deaths.	Month and provinces.	Cases.	Deaths.
1908—Continued.			1908—Continued.		
April:			August:		
Rizal	123	92	Rizal	4,744	3,081
Pampanga			Pampanga		
Pangasinan			Bulacan		
Capiz			Tarlac		
La Union			Nueva Ecija		
May:			Pangasinan		
Rizal	749	533	Benguet		
Bulacan			Iloilo		
Pangasinan			Occidental Negros		
Capiz			Capiz		
June:			La Union		
La Laguna	2,616	1,690	South Ilocos		
Tarlac			Misamis		
Nueva Ecija			Bohol and Antique		
Pangasinan			September:		
Capiz			Rizal	6,494	4,089
La Union			Cavite		
South Ilocos			Pampanga		
July:			Bulacan		
Rizal	5,202	3,141	La Laguna		
Cavite			Batangas		
Pampanga			Tarlac		
Bulacan			Nueva Ecija		
Tarlac			Pangasinan		
Nueva Ecija			Benguet		
Pangasinan			Iloilo		
Benguet			Occidental Negros		
Iloilo			Capiz		
Capiz			La Union		
La Union			South Ilocos		
South Ilocos			Misamis		
Misamis			Antique		
Bohol			Palawan		
Nueva Vizcaya			Total	34,238	22,938

From this table it appears that during the months of May and June, 1907, the provinces of the Philippine Islands were free from cholera so far as is known.

The provinces of Luzon were clear of cholera during January, February, March, April, May, June, July, August, and September, 1907, and the new epidemic beginning in the provinces in 1905 was confined to Rizal, Cavite, Pampanga, Bulacan, Pangasinan, Tarlac, Nueva Ecija and Benguet during August, September, October, November and December of 1905, and January, February, March, April, May, June, July and August 1906.

On September 1, 1906, an epidemic began at Iloilo. It was confined to that province until November 1, when it extended to Occidental Negros. It ultimately reached Capiz, Samar and the Moro Province and continued to prevail in the Visayan Islands until April, 1907. The entire archipelago then remained apparently free from cholera for more than two months but in the following July, August, September and October there occurred a comparatively insignificant epidemic in the Visayan Islands with a total of 154 cases and 133 deaths. Cholera disappeared in the provinces outside of Luzon in October and did not reappear there until March, 1908, since which time it has been continuously present. It reappeared in Luzon on October 6, 1907, and has been continuously present ever since.

If we consider the occurrence of cholera in the provinces as a whole we must therefore recognize three epidemics; that of March 23, 1902, to March 8, 1904; that of August 20, 1905, to April 29, 1907, and that of July 22, 1907, to date.

But if we consider the provinces as divided into two groups, namely the provinces of Luzon and those outside of that Island, we shall note that after the general epidemic beginning March 23, 1902, there were, a Luzon epidemic from August 20, 1905, to December 28, 1906; a second Luzon epidemic from October 6, 1907, to date; and three Visayan Island epidemics which occurred from September 1, 1906, to April 29, 1907, from July 22, to October 1, 1907, and from March 17, 1908, to date, respectively.

The following table shows the proportion of cholera cases to population in each of the provinces infected during the epidemic of 1902-4, and the name of the person or persons who held the office of president of provincial board of health in each province during the time when cholera was present there:

Province.	Proportion of cases to inhabitants.	Presidents of provincial boards of health.
Iloilo	1-15	Dr. Pablo Araneta.
La Union	1-33	Dr. Luis Caballero.
Occidental Negros	1-36	Dr. Mariano Yulo.
Bataan	1-36	Dr. M. de Castro (removed), Dr. A. Olba.
Misamis	1-38	Dr. Francisco Xavier.
Cebu	1-46	Dr. José Mascuñana, Dr. James W. Smith.
Zambales	1-49	Dr. Mariano Felizardo (1 month), Dr. Aquilino Calvo (removed).
La Laguna	1-50	Dr. Telesforo Ejercito.
Capiz	1-50	Dr. Paulino Quisumbing.
Pangasinan	1-51	Dr. John T. Slater (9 months), Dr. V. de Jesus (9 months).
Antique	1-54	Dr. Donato Montinola.
Nueva Ecija	1-70	Dr. Justo Panis.
Batangas	1-75	Dr. José Losada.
Masbate	1-88	Dr. Gavino Vinluan.
Isabela	1-93	Dr. B. Toribio.
Marinduque	*1-97	Dr. Juan Bisintuan.
Bohol	1-99	Dr. Rafael Villafranca.
Ilocos Norte	1-106	Dr. Juan Purungañan.
Ilocos Sur	1-112	Dr. Victorino Crisologo.
Surigao	1-113	Dr. Antonio Fernando.
Rizal	1-119	Dr. Sixto Angeles.
Sorsogon	1-122	Dr. Julio Ruiz.
Bulacan	1-123	Dr. Felix Bautista.
Tarlac	1-138	Dr. Santiago Icasiano (3 months), Dr. Andres Catanjal (17 months).
Samar	1-191	Dr. G. I. Cullen (appointed after epidemic was well under way).
Mindoro	1-128	Matthew Lefeere (for last 7 of the 14 months of the epidemic).
Cavite	1-154	Dr. T. Ejercito (for 9 months), Dr. M. Felizardo (for 29 months).
Ambos Camarines	1-171	Dr. Shannon Richmond.
Oriental Negros	1-177	Dr. H. W. Langham.
Pampanga	1-185	Dr. Manuel Liongson (removed early in epidemic), Dr. C. M. de Mey.
Albay	1-210	Dr. Augustin Scarella.
Romblon	1-264	Sebastian de Castro.
Leyte	1-269	Dr. D. Santos (removed), Dr. José Mascuñana, Dr. H. H. Baker.
Tayabas	1-407	Dr. V. de Jesus (first 4 months), Dr. A. H. Eber, Dr. H. H. Baker.
Nueva Vizcaya	1-62541	Dr. Segundo Isaac.

* In the case of Marinduque the proportion of deaths to inhabitants is given.

The average proportion of persons attacked to the number of inhabitants in the infected provinces as a whole during the period was 1 to 65.

But one case of cholera is officially recorded from Benguet but it is well known that the disease got among the wild people of that province and caused a considerable mortality the extent of which it will never be possible to ascertain. There was no president of the provincial board of health in this province at the time. In one small province, Marinduque, the record of cases was not kept and we have only the record of deaths.

The provinces which escaped during this epidemic were Abra, Lepanto-Bontoc and Palawan. Nueva Vizcaya with but a single case may also be said to have practically escaped. There were some cases in the Moro Province but the Government of this Province being practically separate the Bureau of Health has no statistics covering the cases and deaths there.

The following table shows the number of outbreaks in each province in which cholera has occurred since August 20, 1905, with the duration of each outbreak and the number of cases and deaths caused by it:

Province.	First case.	Last case.	Cases.	Deaths.
Nueva Ecija-----	Jan. 11, 1906	Mar. 5, 1906	158	107
	July 6, 1906	Nov. 12, 1906	765	546
	June 19, 1908	Oct. 11, 1908	387	313
Total-----			1,310	966
Pangasinan-----	July 16, 1906	Oct. 19, 1906	85	65
	Jan. 26, 1908	Oct. 12, 1908	5,644	3,389
Total-----			5,729	3,454
Benguet-----	Aug. 15, 1906	Aug. 15, 1906	1	1
	June 11, 1908	Sept. 21, 1908	27	21
Total-----			28	22
Iloilo-----	Sept. 16, 1906	Nov. 27, 1906	1,798	1,319
	July 24, 1908	Still present.	5,060	3,183
Total-----			6,858	4,502
Occidental Negros-----	Nov. 1, 1906	Apr. 29, 1907	92	64
	Aug. 27, 1908	Still present.	2,080	1,415
Total-----			2,122	1,479
Capiz-----	Nov. 3, 1906	Mar. 29, 1907	260	156
	Apr. 27, 1908	Still present.	834	614
Total-----			1,094	770
Samar-----	Nov. 13, 1906	Nov. 30, 1906	29	27
	Jan. ? 1907	Mar. 22, 1907	51	42
Total-----			80	69
Moro Province-----	Nov. 20, 1906	Nov. 20, 1906	9	7
Leyte-----	July 22, 1907	Sept. 13, 1907	96	87
Masbate-----	Aug. 9, 1907	Oct. 1, 1907	53	42
Zambales-----	Jan. 24, 1908	Mar. 20, 1908	220	156
Mindoro-----	Feb. 3, 1908	Mar. 17, 1908	32	20
La Union-----	Apr. 17, 1908	Apr. 30, 1908	6	5
	June 19, 1908	Still present.	1,154	806
Total-----			1,160	811

Province.	First case.	Last case.	Cases.	Deaths.
Ilocos Sur -----	June 16, 1908	Still present.	2,005	1,459
Misamis -----	July 6, 1908	do -----	1,095	345
Bohol -----	July 26, 1908	Aug. 13, 1908	4	4
Nueva Vizcaya -----	July 20, 1908	July 20, 1908	1	0
Antique -----	Aug. 30, 1908	Still present.	497	206
Lepanto-Bontoc -----	Aug. 31, 1908	Oct. 13, 1908	43	23
Palawan -----	Sept. 14, 1908	Still present.	39	36
Rizal -----	Aug. 20, 1905	Feb. 15, 1906	728	536
	Apr. 2, 1906	Dec. 28, 1906	1,036	776
	Dec. 23, 1907	Still present.	508	398
Total -----			2,272	1,710
Cavite -----	Aug. 20, 1905	Oct. 14, 1906	1,315	977
	Jan. 21, 1908	Feb. 25, 1908	22	20
	Apr. 2, 1908	Apr. 8, 1908	4	4
	Aug. 20, 1908	Still present.	40	22
Total -----			1,381	1,023
Pampanga -----	Sept. 1, 1905	Sept. ? 1905	2	1
	Nov. 6, 1905	Nov. 18, 1906	1,847	1,380
	Nov. 14, 1907	Mar. 12, 1908	379	313
	July 9, 1908	Still present.	97	70
Total -----			2,325	1,764
Bulacan -----	Sept. 4, 1905	Sept. 25, 1905	2	2
	Nov. 1, 1905	April 17, 1906	1,179	909
	June 29, 1906	Oct. 21, 1906	1,296	927
	Oct. 6, 1907	Feb. 29, 1908	176	131
	May 11, 1908	May 11, 1908	1	0
	July 17, 1908	Still present.	309	217
Total -----			2,963	2,186
La Laguna -----	Sept. 7, 1906	Mar. 30, 1906	576	434
	June 20, 1906	Oct. 30, 1906	465	356
	Jan. 1, 1908	Jan. 24, 1908	3	2
	June 15, 1908	June 15, 1908	1	1
	Sept. 7, 1908	Still present.	12	4
Total -----			1,057	797
Tayabas -----	Oct. 12, 1905	Nov. 10, 1905	5	5
	July 25, 1906	Oct. 14, 1906	132	112
Total -----			137	117
Batangas -----	Nov. 20, 1905	Dec. 11, 1905	12	7
	Aug. 7, 1906	Aug. 15, 1906	2	1
	Sept. 17, 1908	Oct. 13, 1908	7	4
Total -----			21	12
Bataan -----	Jan. 4, 1906	May 28, 1906	355	261
	Aug. 16, 1906	Aug. 16, 1906	1	0
	Dec. 10, 1907	Feb. 10, 1908	23	20
Total -----			379	281
Tarlac -----	Jan. 6, 1906	Mar. 18, 1906	34	27
	July 25, 1906	Nov. 22, 1906	91	78
	Mar. 16, 1908	Mar. 23, 1908	10	8
	June 28, 1908	Aug. 28, 1908	393	297
Total -----			528	410

The following table shows the proportion of cases to inhabitants, the number of outbreaks of cholera, and the force employed in checking it in each of the present health districts in which the disease has occurred since August 20, 1905, when cholera first reappeared after the close of the epidemic of 1902-1904.

The figures are brought up to October 19, 1908:

Health district.	Proportion.	Outbreaks.	Force employed.
Pangasinan-----	1-72	2	<i>Dr. Luis Cuballero</i> , D. H. O., in charge, assisted by: C. Brantigan, S. I., Feb. 6, 1908; Dr. P. Clements, M. I., June 9 to July 31, 1908; Dr. H. O. Jones, M. I., June 11 to July 9, 1908; Dr. Luis Abella, M. I., June 11 to Aug. 20, 1908; Dr. Andres Catanjal, June 9, 1908; Dr. B. L. Burdette, M. I., June 10 to July 19, 1908; C. Brantigan, S. I., June 9, 1908; Dr. V. de Jesus, D. H. O., June 8 to Sept. 8, 1908.
Bulacan-----	1-76	6	<i>Dr. F. Bautista</i> , D. H. O., in charge; Dr. M. C. Terry, M. I., temporarily in charge from July 2 to July 13, 1906; Dr. P. Clements, M. I., temporarily in charge from July 15 to July 29, 1906; C. Brantigan, S. I., Nov. 15, 1907, to Feb. 3, 1908.
Rizal, Cavite, and Bataan.	1-82	9	<i>Dr. Mariano Felizardo</i> , P. P. B. H., of Cavite; Dr. Ricardo Ferramon; Dr. Julio Ruiz, P. P. B. H., of Rizal; Dr. M. Felizardo, in charge of district since its establishment, assisted by: Dr. Luis Abella, M. I., July 10, 1906; Dr. P. Clements, M. I., July 1, 1906; C. Brantigan, S. I., July 26, 1906; Dr. P. Clements, M. I., Aug. 21, 1906; Dr. Luis Abella, M. I., Oct. 3, 1906; Dr. P. Clements, M. I., Jan. 4 to Jan. 5, 1908; O. R. Dexter, S. I., Jan. 5 to Jan. 31, 1908; Dr. Luis Abella, M. I., Feb. 24 to Feb. 25, 1908; Dr. P. Clements, M. I., Mar. 27, 1908; O. R. Dexter, S. I., Mar. 8, 1908; Dr. V. de Jesus, D. H. O., Sept. 8, 1908.
Pampanga-----	1-89	4	<i>Dr. F. W. Dudley</i> , P. P. B. H.; <i>Dr. M. C. Terry</i> , D. H. O., in charge July 2, 1906, to Dec. 24, 1906; Dr. S. V. del Rosario, M. I., Oct. 27 to Dec. 24, 1906; Dr. Justo Panis, D. H. O., temporarily in charge from Dec. 24, 1906, to Feb. 4, 1907; Dr. S. V. del Rosario, M. I., temporarily in charge from Feb. 4 to Feb. 23, 1907; Dr. A. Catanjal, D. H. O., temporarily in charge, Feb. 23 to Mar. 15, 1907; <i>Dr. J. Mascuñana</i> , D. H. O., in charge Apr. 5, 1907, assisted by: C. Brantigan, S. I., Nov. 15 to Dec. 23, 1907.
Nueva Ecija-----	1-112	3	<i>Dr. Justo Panis</i> , P. P. B. H., in charge; Dr. M. C. Terry, D. H. O., July 2, 1906, temporarily in charge; <i>Dr. Justo Panis</i> , D. H. O., in charge July 25, 1906, to Mar. 8, 1907; <i>Dr. H. Jacinto</i> , D. H. O., Mar. 8, 1907, to Mar. 17, 1908, assisted by: Dr. F. Bautista, D. H. O., June 8, 1908; Dr. Luis Abella, M. I., June 11, 1908, to Aug. 20, 1908; Dr. A. Catanjal, D. H. O.; Dr. V. de Jesus, D. H. O., Sept. 20, 1908.
Iloilo, Capiz, Antique--	1-115	2	<i>Dr. P. Araneta</i> , D. H. O., in charge; Dr. P. Clements, M. I., Sept. 12, 1906, to Feb. 12, 1907; Dr. Z. Laughlin, M. I., Aug. 13, 1906; Dr. D. Montinola, July 26, 1906, to Sept. 17, 1907, D. H. O. for Antique; <i>Dr. D. Montinola</i> , D. H. O., on cholera duty in Antique, Aug. 17, 1908; <i>Dr. P. Quisumbing</i> , D. H. O., for Capiz, July 25, 1906, to Mar. 23, 1907; Dr. P. Clements, M. I., Dec.—, 1906; Dr. Francisco Xavier, M. I., Feb. 7, 1907, to Sept., 1908; Dr. P. Quisumbing, D. H. O., Sept. 3, 1908.
La Laguna-----	1-141	5	<i>Dr. F. Ampil</i> , D. H. O., relieved July 10, 1906; Dr. W. K. Beatty, D. H. O., July 10 to July 25, 1906, temporarily in charge; <i>Dr. Telesforo Ejercito</i> , D. H. O., July 25, 1906, to Mar. 4, 1907, in charge; Dr. Justo Panis, D. H. O., temporarily in charge, Mar. 5, 1907, to Apr. 8, 1907; Dr. N. Cordero, D. H. O., Apr. 9, 1907, to June 2, 1907; Dr. Luis Abella, M. I., June 3, 1907, to Jan. 1, 1908; Dr. D. Montinola, D. H. O., in charge, Jan. 1, 1908, to Aug. 17, 1908; Dr. J. Kamatoy, D. H. O., Sept. 9, 1908.
Negros Occidental-----	1-152	2	<i>Dr. Mariano Yulo</i> , D. H. O., Jan. 6, 1907, to Apr. 7, 1907, in charge; <i>Dr. P. Quisumbing</i> , D. H. O., in charge, Apr. 17, 1907, assisted by: O. Dexter, S. I., Nov. 10, 1908, to May 1, 1908; Dr. Francisco Xavier, D. H. O., Sept. 10, 1908.
La Union and Zambales.	1-166	3	<i>Dr. Telesforo Ejercito</i> , D. H. O., in charge, Apr. 15, 1907, assisted by: Dr. Luis Abella, M. I., June 9, 1908; Dr. P. Clements, M. I., June 9, 1908, to July 31, 1908; Dr. H. O. Jones, M. I., July 4 to Aug. 4, 1908; C. Brantigan, S. I., Aug. 15, 1908; W. G. Hogley, S. I., Sept. 10, 1908.

Health district.	Proportion.	Outbreaks.	Force employed.
Ilocos Norte, Ilocos Sur.	1-133	1	<i>Dr. C. Mora</i> , D. H. O., assisted by: <i>Dr. P. Clements</i> , M. I., Aug. 10, 1908, to Sept. 21, 1908; <i>C. Brantigan</i> , S. I., Aug. 15, 1908.
Surigao, Agusan, and Misamis.	1-186	1	<i>Dr. A. Fernando</i> , D. H. O.
Benguet -----	1-242	2	<i>Dr. J. W. Smith</i> , Acting D. H. O., assisted by: <i>Harry Percy</i> , S. I.; <i>S. L. Barron</i> , S. I.
Tarlac -----	1-289	4	<i>Dr. A. Catanjal</i> , P. P. B. H., in charge; <i>Dr. M. C. Terry</i> , D. H. O., in charge temporarily, June, 1906; <i>Dr. A. Catanjal</i> , D. H. O., in charge July 25 to Dec. 14, 1906; <i>Dr. L. Caballero</i> , D. H. O., temporarily in charge, Dec. 14, 1906, to Feb. 9, 1907 <i>Dr. A. Catanjal</i> , D. H. O., in charge, Feb. 9, 1907, to July 9, 1908.
Palawan -----	1-883	1	<i>Dr. J. H. Biggar</i> , Acting D. H. O., Sept. 12 to Oct. 3, 1908, assisted by: <i>R. MacDonald</i> , S. I., Oct. 12, 1908.
Batangas and Tayabas.	1-2551	3	<i>Dr. J. Mascuñana</i> , P. P. B. H. and D. H. O., in charge, assisted by: <i>C. Brantigan</i> , S. I., July 27 to Oct. 1, 1906; <i>Dr. V. de Jesus</i> , D. H. O., July 27 to Oct. 4, 1906; <i>Dr. Julio Ruiz</i> , D. H. O., July 28 to Oct. 4, 1906; <i>C. Palmer</i> , S. I., July 21 to Sept. 18, 1906; <i>H. Percy</i> , S. I., Sept. 18, 1906, to Feb. 20, 1907; <i>Dr. J. D. Long</i> , Assistant Director of Health, Sept., 1906; <i>Dr. A. Catanjal</i> , D. H. O., temporarily in charge Dec. 14, 1906, to Feb. 9, 1907; <i>Dr. J. Mascuñana</i> , D. H. O., temporarily in charge Feb. 9, 1907, to Mar. 15, 1907; <i>Dr. V. de Jesus</i> , D. H. O., in charge Mar. 15, 1907, to date; <i>Dr. J. Losada</i> , D. H. O., Sept. 9, 1908.
Mountain Province----	1-3205	1	<i>Dr. Victorino Crisologo</i> (suspended in early days of epidemic), D. H. O.; <i>Lieut. Governor Evans</i> ; <i>C. Brantigan</i> , S. I.; <i>C. Palmer</i> , S. I.; <i>Dr. Paul Clements</i> , M. I.
Masbate, Romblon, and Mindoro.	1-4378	1	<i>Dr. C. Mora</i> , D. H. O., July 1, 1906, to Apr. 17, 1907, aided by: <i>Dr. Luis Abella</i> , M. I., Aug. 16, 1906, to Oct. 4, 1906; <i>O. R. Dexter</i> , S. I., in charge of cholera outbreak from Feb. 16, 1908, to Mar. 31, 1908.
Samar and Leyte -----	1-3154	3	<i>Dr. G. I. Cullen</i> , D. H. O., in charge, assisted by: <i>C. Brantigan</i> , S. I., Aug. 17 to Sept. 28, 1907.
Nueva Vizcaya -----	1-62541	1	No district health officer.

The following districts have remained free from cholera since the epidemic of 1902-4 to October 19, 1908:

Health districts.	District health officers.
Cebu and Oriental Negros.....	<i>Dr. Arlington Pond</i> , D. H. O.
Bohol	<i>Dr. R. Villafranca</i> , D. H. O.
Sorsogon	<i>Dr. Julio Ruiz</i> , D. H. O.; <i>Dr. V. de Jesus</i> , D. H. O.
Albay and Ambos Camarines....	<i>Dr. W. K. Beatty</i> , D. H. O.
Cagayan and Isabela.....	<i>Dr. F. Ricerra</i> , D. H. O.; <i>Dr. B. Torribio</i> , D. H. O.

The active infection which began to spread from towns near Manila in August, 1905, did not entirely disappear from the archipelago as a whole until April 29, 1907, and even then the provinces remained clear only until July 22, 1907.

I have already called attention to the startling difference between the result of the campaign in Manila and that of the one in the provinces. The explanation is not far to seek. There was a small but very effective body of men available for the work in Manila while in the provinces it is an unfortunate fact that the body of men available was not only small but was on the whole very ineffective. I shall defer further discussion of this point until I have stated the facts as to the recurrence of cholera in Manila.

SUBSEQUENT EPIDEMICS IN MANILA.

Manila remained free from cholera from March 21, 1906, to May 8, 1906, and there was but one case between February 21 and May 11. On the latter date the disease reappeared, continuing until November 27, the number of cases by months being as follows:

Month, 1906.	Cases.	Deaths.
May	11	11
June	91	81
July	393	349
August	211	179
September	80	67
October	27	24
November	7	6
Total	820	717

From November 28, 1906, until July 13, 1907, there were no cases.

Cholera then reappeared and continued until March 18, 1908. The number of cases by months was as follows:

Month.	Cases.	Deaths.
1907—July	3	2
August	5	5
September	72	64
October	76	65
November	32	32
December	35	26
1908—January	184	151
February	14	11
March	5	5
Total	426	361

The outbreaks of May 8 to November 27, 1906, and of July 13, 1907, to March 18, 1908, were of comparatively insignificant importance and were handled as a part of the ordinary routine by the Bureau of Health without any change in the force ordinarily employed. It was, however, deemed advisable to postpone the Carnival from February 8, 1908, to February 27, 1908, for the reason that numerous persons from remote provinces were sure to attend it and it was necessary to avoid the possibility that some of them would become infected with cholera in Manila and scatter the disease when returning to their homes.

The last case occurred on March 18, 1908, and the city then remained clean until June 8, 1908, when the cholera, which had meanwhile been raging in the provinces to the north, reappeared. From that time to the present Manila has been repeatedly reinfected from the provinces.

Again and again the infection has been stamped out only to reappear. Cases have occurred as follows:

	Cases.		Cases.
June 8	1	Sept. 12	7
12	1	13 and 14	32
23	1	15	9
July 7	1	16	23
15	1	17	31
17	1	18	24
22	2	19	27
27	2	20	43
29	3	21	60
31	4	22	56
Aug. 3	4	23	36
4	2	24	36
6	2	25	41
7	3	26	42
8	1	27	31
10	4	28	16
12	1	29	14
14	3	30	13
18	1	Oct. 1	12
21	1	2	10
22	1	3	5
24	2	4	9
25	1	5	11
27	3	6	6
28	6	7	8
29	1	8	13
31	1	9	7
Sept. 1	3	10	5
2	3	11	3
3	1	12	4
4	1	13	7
5	5	14	4
7	7	15	14
8	3	16	3
9	6	17	5
10	3	18	6
11	10	19	5

During the week ending September 17, the towns of Calumpit, Bulacan, Bocaue, Hagonoy, Malolos, Paombong, Quingua, Obando, Santa Maria, Baliuag, and Meycauayan, all in Bulacan Province, were infected. There was some panic among the people of that province, and the people of the district of Tondo state that a considerable number of persons from these towns fled to Manila, bringing the disease with them. It was during this week and the one following that conditions became threatening in Manila.

Due in part to the increasing number of persons who have recovered

from cholera at the San Lazaro Hospital or who have had friends saved there, and in part to the more friendly attitude of some of the newspapers published in the Spanish language, there has been less fear of this institution than ever before. In consequence, the cases have been received earlier, on the average, and the mortality has been correspondingly low, but the presence of numerous convalescents has tended rapidly to fill the hospital, and this, with the sharp increase in cases which occurred from September 12 to September 21, made it evident that additional quarters must be secured.

The first step toward meeting this difficulty was to vacate and thoroughly disinfect the smallpox hospital, the patients being transferred to a distant building. The second was to accept the generous offer of the authorities of the Mary J. Johnston Hospital to give the Bureau of Health the use of the entire lower floor of that institution, where it was possible to place some thirty beds, and the third was to clear both floors of the insane pavilion and convert it into a cholera hospital, for which it is admirably adapted. Overcrowding has been constantly avoided, although there were for several days a number of patients on the wide verandas of the contagious-disease hospital. Keeping them there was unobjectionable from a hygienic standpoint, so long as the weather was good, but, if continued, would have resulted in criticism on account of the belief prevalent among the Filipinos that night air is dangerous.

COÖPERATION WITH THE BUREAU OF HEALTH.

On the very day that the use of the Mary J. Johnston Hospital was arranged for Msgr. Tuñon and Father Chouza called on behalf of the Archbishop of Manila, who was absent in the provinces, to offer the use of the Santa Isabel Convento in the Walled City, and of the Convento connected with the San Sebastian Church, for hospital purposes should they be needed.

The latter building, on account of its comparatively isolated position, was deemed the more desirable of the two and upon inspection proved to be well suited to hospital purposes. The rector of Santo Tomas University also assured me of his confidence that the authorities of that institution would, if necessary, gladly offer their building for hospital purposes as they did in 1882. Fortunately the spread of cholera was promptly checked, and it was not necessary to accept any of these kind offers which were, however, most highly appreciated, especially as they were made spontaneously and were an evidence of the general desire on the part of the public to coöperate in the stamping out of cholera in the city.

Further evidence of this desire was afforded by the prompt action of

the Camp Lawton Post of the Veteran Army of the Philippines, whose members promptly offered their services:

The ACTING DIRECTOR, BUREAU OF HEALTH, *Manila, P. I.*

SIR: I have the honor to inform you, that, at a special meeting of the Camp, held on the evening of September 21, 1908, the following resolution was adopted:

"Resolved, That the commander be authorized to notify the Director of Health that the services of the members of this camp are at his disposal at any time, to aid in stamping out cholera in the city of Manila."

All members have been requested to notify the proper authorities of all premises in their neighborhood which are in an unsanitary condition so that the Bureau of Health can take such steps as may be necessary.

Should occasion arise requiring the further assistance of the members of the camp, it is requested that I be notified so that the necessary instructions may issue.

Very respectfully,

WM. BROOK, *Commander.*

VALUABLE ASSISTANCE GIVEN BY THE POLICE AND FIRE DEPARTMENTS.

Of especial value has been the work of the police and fire departments. At frequent intervals the police have made systematic house-to-house inspections for cholera cases. This is work of a very delicate nature, as there is always danger that inspectors may be inconsiderate, rude, or even worse when necessarily trespassing upon the privacy of those who do not welcome what seems to them a needless and unwarranted intrusion. There has been little complaint, from responsible sources, of the manner in which the police have made their inspections, which have resulted in the early detection of numerous cases and have greatly facilitated the suppression of the infection.

The use of chemical fire engines in disinfecting buildings and premises, suggested by the chief of the fire department, has proved of great assistance, making possible rapid and thorough disinfection upon a much larger scale than would otherwise have been practicable. Both policemen and firemen have often worked to the point of complete exhaustion and the assistance rendered by them has been invaluable.

VOLUNTEER CHOLERA FIGHTERS.

Doctor Nichols of the United States Army Medical Corps volunteered for service and was given immediate charge of the Mary J. Johnston Hospital. Eighteen students from the Philippine Medical School volunteered and were assigned to work as nurses and attendants at the hospitals. At the outset a few of these young men declined to perform what they termed "menial service." The necessity for the performance of this service was fully explained to them and they were interrogated as to their willingness to do for people of their own race the work which highly educated American women were performing for them. It was at the same time suggested that any of them who did not wish to do such work might go. Thereafter they discharged their disagreeable and somewhat dangerous duties faithfully and well.

Twelve students of the University of Santo Tomas also volunteered for cholera work and on the 23d of September sent the following letter; through Father Velasquez, rector of the University:

The undersigned last year students of the faculty of medicine of the University of Santo Tomas voluntarily offer themselves to the Government of the Philippine Islands to aid in the extinction of the prevailing malady in the city of Manila, whenever and wherever it may be opportune to use their services.

MANILA, *September 23, 1908.*

ESTEBAN ARROYO,
JOSE AREVALO,
NEMESIO A. BADILLA,
O. TEOPACO,
MAXIMO CUESTA,
RICARDO MOLINA,
FELINO SIMPAO,
ANSELMO ABELA,
PEDRO A. NARCISO,
CLEMENTE VELASCO,
JOSE F. QUINTO,
L. E. GUEBARA.

This offer was accepted, and these young men rendered valuable service at the hospitals during the period when the number of cases was comparatively large. Later it seemed desirable to assign some of the students of the Philippine Medical School to the work of train inspection on railway lines terminating at Manila, but the young men placed in charge of this work were recalled by the dean of the faculty of the school.

A request was thereupon made that the Santo Tomas medical students take up this service, which they did, performing it in a highly efficient and satisfactory manner.

It was suggested on September 22 to the young women who are learning the profession of nurse under the immediate direction of Miss Charlotte Layton at the Philippine Normal School that their services could be used to great advantage at this time. On September 26, four of them, in charge of Miss Layton, responded to this suggestion and subsequently rendered valuable assistance in caring for Filipina women.

On the whole, it may safely be said that the hospital care given to cholera victims during the present epidemic has been better than ever before in the history of the Philippine Islands.

CRITICISM OF THE MEASURES ADOPTED FOR SUPPRESSION OF CHOLERA DURING 1908.

In spite of this fact there have not been lacking complaints as to the alleged unprepared condition of the San Lazaro Hospital. It has been said, for instance, that the institution was unscreened and that the work of screening it had to be undertaken after numerous cases of cholera were in the wards. The fact is that the screening of the hospital was undertaken soon after it was completed, but it was found that metal

screening rusted out very rapidly and as the hospital often remained unoccupied for months at a time, and even when occupied was entirely free from flies, with nurses enough so that the dejecta of patients were instantly cared for, there was no danger of infection. Under these circumstances I agreed with Dr. Heiser that it would be foolish to incur the expense of constantly renewing this screening, especially in view of the fact that if an epidemic should threaten, the entire place could be screened with mosquito netting in a day or less.

In point of fact, simultaneously with the increase in cholera cases in September came a plague of flies. The hospital was promptly screened as had been planned, but as, on the average, 25 per cent. of the typhoons of the year occur in September, it was deemed advisable to use wire screening rather than ordinary mosquito netting, and the work of putting this in place took longer and involved more confusion than would have been the case had ordinary mosquito netting been used. The present screening will rust out in a few months. It would, in my opinion, be wise to order copper screening from the United States, and test its durability.

It should be stated, in passing, that the kitchen and dining room of the institution have always been kept screened.

It has been claimed that the screening of the morgue was broken and had to be replaced after the epidemic was on. The facts are as follows:

"The San Lazaro morgue was opened for service on May 1, 1903, and so far as records are obtainable it was then screened and has been screened ever since. At various times the screening has been renewed, and about the middle of August it was double-screened—that is, the old screening was allowed to remain and new screening placed on the outside to insure that if breaks should occur in the old screening, the place would still be protected. It is expected to follow this system hereafter. At no time has the morgue been without screening. The report of new screening during September may have been occasioned by the fact that as an additional precaution during the cholera epidemic when the number of bodies in the morgue had increased to a considerable extent beyond that usually found in the morgue, and consequently persons were passing in and out oftener than was customary, an additional vestibule was added to the vestibule already on the morgue, making it necessary to pass through three screen doors before entering into the morgue proper; this vestibule was begun on September 22, and completed in about three days."

It is furthermore true that the laundry facilities at the San Lazaro Hospital are not thoroughly modern nor indeed adequate to meet such an emergency as that through which we have just passed. I must plead guilty of having overlooked this fact until it was brought to my attention by the nurse in charge of the hospital, when the epidemic was well under way.

The electric apparatus for heating water on the wards was put out of commission by a change in the nature of the electric current supplied to the city and has never been replaced, its place being taken by kerosene heaters, which are quite satisfactory.

It should be remembered that it is neither wise nor necessary to keep a hospital which stands nearly or quite empty for considerable periods equipped and officered in such a way that it may be instantly run at its full capacity without any change whatever. Supplies and apparatus not ordinarily necessary must for safety's sake be removed to store rooms, and when an emergency threatens, the necessary steps to meet it must be seasonably taken. This was done in the present instance, *but some of those who saw work going on seemed surprised that it should be necessary.*

It has been alleged that the Director of Health has pursued a niggardly policy and has prided himself on turning in a large surplus at the end of the year when the money should have been spent in sanitary work. I shall later show that the main difficulty has been one of *men* rather than of money. Had more men been available far more money might very advantageously have been employed. I have never known Dr. Heiser to be unwilling to incur an expenditure for any needed and practicable improvement when funds to pay for it were available.

It has been alleged that under orders from the Governor-General the situation in the Visayan Islands and that in the provinces north of Manila was left in the hands of the Filipino district health officers, in order that the people might be taught by experience a hard lesson which they would not be likely soon to forget. Subject to the general control of the Governor-General the *Secretary of the Interior* is in charge of health matters. The Governor-General has issued no such instructions and there is not the slightest ground for placing the blame for the situation in the provinces upon him. The question of further depleting our already weakened Manila force to recruit that in the provinces has been not one of *desirability* but one of *possibility* if Manila was to be safeguarded. If a mistake has been made, I am of the opinion that it has been through sending too many men from Manila to the provinces and thus unduly weakening the defense of the city. With the present force it is impracticable to operate successfully in both regions at once. The extent to which Manila has been stripped to help the provinces is shown by the table on page 113.

As a result of the absolute lack of a sufficient number of thoroughly trained men it has, in point of fact, been necessary to leave the situation in the Visayan Islands almost entirely in the hands of the local health officers, but it is an ill wind that blows no one good and I respectfully suggest that a study of the statistical information hereinbefore submitted, in so far as it bears upon the course of the present epidemic of cholera in Capiz and its spread to Iloilo and Western Negros on the one side and to Antique and Palawan on the other, with a total number of cases to October 19 of 8,441, inculcates a lesson from which there is no possible escape.

REASONS FOR CHANGES OF CHIEF HEALTH OFFICERS.

It has been said that the frequent appointment of new chief health officers was responsible for the lack of a definite and more successful policy.

Maj. L. M. Maus, the first Commissioner of Public Health, who was relieved on July 31, 1902, had long before voluntarily requested such relief. It had been arranged for, and his successor was on his way. It is true that, in the end, his resignation was insisted upon because of the critical cholera situation and the belief that in the physical condition in which he was he could not control it. Dr. Frank S. Bourns was therefore temporarily appointed Commissioner of Public Health until cholera in Manila could be brought under control.

The acceptance of Major Maus's resignation and the appointment of Dr. Bourns both took place when I was ill at Baguio, a place which was then without any means of direct communication with Manila and I knew nothing of these changes until my return. I beg to say, however, that under the circumstances I should have favored them had I been in Manila.

Dr. Bourns accepted temporary appointment reluctantly, accomplished the work expected of him in the most satisfactory manner, and retired as soon as Governor Taft would allow him to do so.

Major Carter held the position of Commissioner of Public Health from September 8, 1902, to April 28, 1905. During this entire period he suffered as few Americans have ever suffered in the Philippines from the climate and he was ultimately relieved, at his own earnest request, when worn out by hard work and ill health.

Dr. Victor G. Heiser was appointed Commissioner of Public Health on April 28, 1905, and later his title was changed by law to Director of Health. He still holds that office and I sincerely trust that he will long continue to do so.

He came to the Philippines as Chief Quarantine Officer on February 17, 1903, and at the time he sailed for the United States on August 5, 1908, had served continuously without leave of any sort from the time of his arrival in the Islands. He had habitually worked until eleven and twelve o'clock at night and within a short period prior to his departure had twice been sent to the hospital after refusing to go there until he was literally unable to keep his feet. Even as it was he was ordered to the United States, not to rest but to work for the Insular Government, and he will return here before he has had anything like the leave to which he has long been entitled.

Whether or not Dr. Heiser was disposed to desert his post may be inferred from the following facts. The climate of Baguio has always proved particularly stimulating to him and shortly after he left the

hospital for the second time I urged upon him the desirability of temporarily transferring his office to that place, but although barely able to keep about he strenuously objected to the suggested change on the ground that *he must remain in immediate personal charge of the work of his Bureau*. Finally it became necessary for me to issue to him an imperative order to transfer his office to Baguio for a minimum period of one month. Before he had been there ten days he was begging to be allowed to return to Manila in order to make a trip on a coast guard boat and personally to supervise and direct the collecting of a shipload of lepers, and this I finally permitted him to do having first given him imperative instructions to return to Baguio immediately after the lepers were on shipboard.

In this connection I desire to call attention to the nature of the work which has not infrequently been performed by Dr. Heiser on these leper collecting trips. No one who has not seen them can form the faintest idea of the horrors to be encountered among a shipload of leper outcasts gathered for transportation to Culion. Distorted and deformed by the most frightful of all diseases these victims of a living death, dripping with gangrenous putrefaction, stinking to heaven, and in some cases literally falling to pieces when moved, present pictures which sear themselves upon the very brain of him who sees them and which may well appal the stoutest heart.

When no other white man could be hired by money to touch them and when no Filipino could be influenced by love of gain or by love of his own people to go near them, Dr. Heiser has, not once but repeatedly taken these poor putrefying wrecks of humanity in his arms and borne them tenderly on board the vessel that was to convey them to their final earthly home, and having done this has rolled on the deck of the vessel overcome by uncontrollable nausea. These facts were not learned from him, for he has never mentioned them until compelled to do so by the interrogations of his superiors, but from the officers of Coast Guard vessels and from others who have witnessed his acts. And this is the man who has been charged with indolence, with neglect of duty, and with displaying cowardice by running away from Manila when there were a few scattering cases of cholera there on the pretext of attending the International Tuberculosis Congress at Washington! Can he afford to ignore the curs that yelp at his heels? I think so.

It is true that he really desired to go to the Tuberculosis Congress at Washington. Why? Was it for his own recreation or enjoyment? Not at all. *It was because tuberculosis in these Islands claims its hundreds while cholera claims its scores. Even during the very worst years of the 1902-04 epidemic the deaths from tuberculosis in Manila were in excess of those from cholera and this disease we practically ignore because, forsooth, it is always with us. There is good reason*

to believe that one out of every five or six inhabitants of the Philippine Islands suffers from some form of tuberculosis at some period during his life and one of the problems which Dr. Heiser has set himself is to plan the most effective possible campaign against the "great white plague."

While the danger involved in allowing him to leave the Philippine while cholera was still prevalent in the provinces was fully realized it was not apparent that the situation would be materially benefited by killing a faithful and efficient employee, and the hard fact is that the burden which has rested on Dr. Heiser and on his predecessors has been a killing burden. In Dr. Heiser's case it has been especially heavy through the cutting down of his available force of efficient subordinates.

It should be said, however, that the only change which results from the sending of Dr. Heiser to the International Tuberculosis Congress, is that at the present time we have in general charge of the work of the Bureau of Health one efficient man when otherwise we should have two. Dr. McLaughlin, who, like Dr. Heiser, is an officer of the United States Public Health and Marine Hospital Service and has the training which such a position implies, has displayed such energy and efficiency in dealing with the epidemic as to leave nothing to be desired.

THE BUREAU OF HEALTH CHARGED WITH RESPONSIBILITY FOR THE OCCURRENCE AND THE CONTINUED PRESENCE OF CHOLERA IN THE ISLANDS.

Fortunately for all concerned the situation has not been without its humorous features. Not only has the American administration been charged with changing the climate of the Philippines and with other minor offenses but it is made responsible for the coming and continuance of cholera, the accusation in one instance taking the following form:

"Shortly after the establishment of the civil régime there was organized an office of health in the form in which it is now constituted. Ten years had elapsed at that time during which the archipelago had been free from cholera and immediately following upon such organization in 1902, there came the sanitary crisis which is causing such injury to commerce."

On the same page of the newspaper which publishes this comment with approval, appears the announcement of a commercial house to the effect that on the 23d of September they began to advertise a nostrum known as "Ponche Soto;" that from that time to date (October 8) they had sold nine hundred and forty-three bottles, and that from the time public consumption of "Ponche Soto" had increased the number of persons attacked by cholera had steadily diminished. Thus the efficacy of the nostrum was proved, and the bad sanitary situation created by the Bureau of Health during six years of maladministration had been almost remedied, so far as the city of Manila was concerned, in the short space

of thirty-one days through the sale of nine hundred and forty-three bottles of "Ponche Soto." The advocates of the argument *post hoc ergo propeter hoc* in these two cases were at least consistent. This is the sort of reasoning which we are only too often called upon to meet.

The article above referred to says that from the year 1902, with more or less brief periods of intermission, the country has suffered from a cholera epidemic which the methods employed by the office of health have not sufficed to extirpate *and that this never occurred previously in the Philippines nor within many years in any civilized country.* I have already shown that it *did* occur from 1882 to 1897, during which period cholera was constantly present and conditions were far worse than at any subsequent time.

CONDITIONS FAVORABLE TO THE PROPAGATION OF CHOLERA IN THE PHILIPPINES.

Furthermore, it might well be replied that there is no other *civilized* country where the customs of the inhabitants are so favorable to the dissemination of cholera and undoubtedly the worst of these, universal among the common people and by no means confined to them, is that of eating with the fingers. It would be superfluous to mention the ways in which the fingers may readily become contaminated. Simple washing does not suffice to remove cholera germs and when the family, or a group of friends, gather for a meal and dip their fingers first into the common dish of rice and then into that of fish or other *vianda*, if one of their number has an infected hand others are likely to suffer. Especially is this true where food ever so slightly contaminated is left over and eaten later. Germs may then multiply with great rapidity. Drinking water is commonly kept in large earthen jars into which those who wish to drink dip cups or half cocoanut shells, *and incidentally their fingers*, and thus the drinking water, even if pure at the outset may readily become infected.

Unfortunately, it is by no means certain that it will be pure. The drinking water of these Islands comes almost entirely from open springs and streams or from shallow wells into which surface drainage readily runs. Clothes are frequently washed at the side of the family well and that evil consequences follow the use of such water, even when cholera does not prevail, is shown by the fact that the drilling of artesian wells and a general use of the water from them in certain municipalities has sufficed to reduce their death rate fifty per cent.

A further serious obstacle is found in the wide prevalence of foolish or superstitious beliefs to the effect that the drinking of boiled water causes the hair to fall out; that cholera is caused by the poisoning of wells and streams by foreigners, or by a black dog which runs down the street, or in some other equally impossible way. Finally, in common with other

tropical countries, the Philippines have a climate which favors the continued existence of cholera germs when once they find lodgment in any suitable medium and thus there is an ever-present possibility that the disease may become endemic in a given locality.

THE GROWTH OF RAILWAYS A SOURCE OF DANGER.

One source of danger which has arisen since the last serious epidemic in Spanish times seems to have been generally overlooked. So long as inland travel was necessarily undertaken on foot, or horseback, in vehicles or in small boats, it was necessarily slow. The ordinary incubation period of Asiatic cholera in this climate is forty-eight hours and under these circumstances the infection could not spread very rapidly, but with the construction of railways a new factor was introduced. One may travel quite a distance in forty-eight hours even on the Manila and Dagupan Road, and the infection from Manila of the Provinces of Rizal, Bulacan, Pampanga, Tarlac, Pangasinan, La Union, Nueva Ecija, Laguna, and Cavite within twelve hours is now theoretically possible owing to the growth of railway lines.

REORGANIZATION OF THE BOARD OF HEALTH.

It is not true that the "office of health" was organized as it is now constituted in 1902. On the contrary it has since undergone a complete reorganization. The executive powers which were originally vested in a board of five members have been conferred upon a single individual, namely the Director of Health, while the original thoroughly trained and efficient force of the board has scattered, largely as a result of the unsatisfactory conditions of the service created through legislative enactments. The positions formerly occupied by many of these men have been abolished.

THE CLAIM THAT FILIPINOS ALONE SHOULD BE EMPLOYED TO COMBAT CHOLERA.

The claim has been made that our difficulties in dealing with cholera at Manila and in the provinces would speedily end were we to put all of the work of combating it in the hands of Filipinos, and that these difficulties would be greatly diminished in Manila were we to make the management of the cholera hospitals exclusively Filipino, the reason assigned being that the Filipinos better understand their own people and enjoy their confidence to a higher degree than do the Americans.

The actual result of leaving the situation in certain provinces entirely to Filipinos is demonstrated by the statistical tables in this report. This result is hardly such as to justify any extension of the policy. It is interesting to note that we have had there the same story of concealment of the sick and secret burial of the dead with which we are so familiar at Manila.

THE COMMON PEOPLE LACK CONFIDENCE IN PHYSICIANS.

The difficulty arises not so much from the lack of confidence in physicians of any particular nationality as from a lack of confidence in physicians as a class.

Even in Manila, where there are far more Filipino physicians in proportion to the number of inhabitants than can be found anywhere else in the Archipelago and where a number of competent Filipinos are employed as municipal physicians to give gratuitous care to the indigent sick, not less than 50 per cent of the deaths occur without medical attendance, a fact which would not seem to indicate a high degree of confidence on the part of the Manila public at large in physicians of any nationality.

THE BEST RESULTS OBTAINED BY COÖPERATION BETWEEN AMERICANS AND FILIPINOS.

During the present epidemic the work at the San Lazaro cholera hospital has been carried on under the general supervision of an American physician aided by two American and three Filipino physicians, by seven American trained nurses, by four Filipina nurses who have partially completed a course of training, by three American hospital stewards, by twelve students from the Philippine Medical School, and by twelve medical students from the University of Santo Tomas. It seems to me that this has been a most satisfactory arrangement. At all events the death rate has been extraordinarily low, being but 47.3 per cent. of the total number of cases admitted up to October 24, 1908, *and this in spite of the fact that many of the patients were so far gone on arrival at the hospital as to be without pulse at the wrist.*

THE QUESTION OF DISINFECTANTS.

It has been charged that the present epidemic found the Bureau of Health without a proper supply of disinfectants and that a part of those used during the early days of the epidemic were practically worthless.

The following memorandum and correspondence give the facts:

Memorandum for the honorable the Secretary of the Interior relative to disinfectants.

A table is attached to show the amount of disinfectants on hand, received, issued, and remaining on hand for 1905, 1906, 1907, and up to the present time.

It may be stated that at no time has the Bureau of Health been without disinfectants properly to disinfect all cases, premises, and contacts where cholera occurred.

Reference to the amounts of disinfectants for the three years will show that according to experience this Bureau had on hand amounts considered necessary as in previous years. At all times was it taken into account that the Quarantine Service, the Army and Navy, Japanese commercial houses, and Hongkong had supplies which could be drawn upon, and by no reasoning could the purchase of

extraordinary amounts, more than had been needed in previous years, be justified.

The campaign this year was conducted upon different lines than years previous, this being due to the fact that in no previous experience in recent years had there been such general infection nor had the number of cases risen to the number per day that it did in this epidemic. The report that the Bureau of Health had run out of disinfectants was probably founded upon the fact that we were constantly requesting information as to quantities and prices obtainable, in order to insure a constant supply. It is true that on two days three of the tank wagons used electrolysed salt water which it was found would kill cholera bacilli promptly, but these wagons were used only for general disinfecting purposes, and at no time was there any danger that for actual cholera purposes the supply of disinfectants would be exhausted.

CHANDLER,
Chief Clerk, Bureau of Health.

Statements on disinfectants.

Disinfectants.	On hand Dec. 31, 1904.	1905.				1906.			
		Re- ceived.	Total.	Issued.	On hand Dec. 31.	Re- ceived.	Total.	Issued.	On hand Dec. 31.
Bichloride ----- kilos.		200	200	94 ¹ / ₁₀	105 ⁹ / ₁₀	187 ¹ / ₂	293 ³ / ₄	188 ⁹ / ₁₀	104 ¹ / ₂
Lime: -----									
Chloride ----- pounds.	1, 045	24, 800	25, 845	23, 745	2, 100	14, 000	16, 100	14, 600	1, 500
Rock ----- sacks.	18	165	183	149	34	1, 550	1, 584	1, 550	34
Carbolic acid: -----									
Crude ----- {barrels	5 ¹ / ₂	1	6 ¹ / ₂	6	¹ / ₂	10	10 ¹ / ₂	9 ⁵ / ₈	³ / ₄
{gallons.		10	10		10	334 ¹ / ₂	344 ¹ / ₂	255	89 ¹ / ₂
Crystals ----- drums.	14	100	114	79	35	90	125	119	6
Phenol ----- liters.	65 ¹ / ₂	250	315 ¹ / ₂	128 ¹ / ₂	186 ¹ / ₂	2 ¹ / ₂	189 ¹ / ₂	21 ¹ / ₂	168
Formaldehyde ----- kilos.	517		517	133	384	240	624	440	184

Disinfectants.	1907.				1908.			
	Re- ceived.	Total.	Issued.	On hand Dec. 31.	Re- ceived.	Total.	Issued.	On hand Oct. 12.
Bichloride ----- kilos	200	304½	197	107½	181½	239	165	74
Lime: -----								
Chloride ----- pounds	10,250	11,750	8,850	3,200	2,000	5,200	3,900	1,300
Rock ----- sacks	765	799	753	46	27,252	27,298	27,298	-----
Carbolic acid: -----								
Crude ----- barrels		½	½					
" ----- gallons	539	628½	529	99½	2,531½	2,631	2,631	-----
Crystals ----- drums	87	93	76	17	75	92	79	13
Phenol ----- liters		168	39½	128½	299½	427½	159½	268
Formaldehyde ----- kilos	210	394	233	161	2,270	2,431	2,431	-----
Jeye's fluid ----- gallons					4,000	4,000	3,360	640
Trikresol ----- liters					442½	442½	442½	-----

MANILA, August 20, 1908.

The PURCHASING AGENT, *Bureau of Supply, Manila.*

SIR: I have the honor to invite your attention to the fact that investigation by your office and this office develops the fact that there is a scarcity of carbolic acid in the city. Owing to the presence of cholera in the provinces, it is deemed advisable to take measures immediately to assure that an adequate supply is on hand as soon as possible.

Messrs. Watson & Co. wrote to their principals in Hongkong on August 12 to ascertain what amount could be secured there and they expect an answer by return mail. Local agents with Singapore and Japanese principals are also taking steps to ascertain amounts available. This Bureau has on hand a month's supply

for present needs and it is understood that your Bureau has some 1,200 gallons en route. Requisition has been made upon you to-day for 600 gallons crude and 50 drums crystal, which it is hoped will be obtained as soon as possible, reference being had to the letter of Watson & Co. above mentioned. The supply likely to be needed by the provinces is difficult to estimate; Ilocos Sur will probably need 200 gallons and Iloilo 200 gallons. The remaining provinces are most of them slightly infected and it is believed that 1,000 gallons on hand would enable you to fill requisitions according to present conditions. It is believed, however, that as a precautionary measure, steps should be taken to arrange orders for immediate shipment from the nearest markets in case the demand should increase. It may be taken into account that this disinfectant will always be in demand, does not easily deteriorate and that there is very little danger of overstocking.

Very respectfully,

A. J. McLAUGHLIN,
Acting Director of Health.

OFFICE OF THE BUREAU OF SUPPLY,
Manila, P. I., August 27, 1908.

SIR: Referring to your recent communication, I have the honor to inform you that immediately upon its receipt, this Bureau sent a cablegram to Japan inquiring as to whether or not 50 drums crude carbolic acid could be furnished.

A reply has been received to the effect that there is no crude acid obtainable in the Japanese market, but red crystals can be supplied. Please advise us at your earliest convenience whether or not a supply of carbolic acid in red crystals would be a good substitute for crude carbolic acid.

Very respectfully,

GUS JOHNSON,
Assistant Purchasing Agent.

DIRECTOR OF HEALTH, *Bureau of Health, Manila, P. I.*

[First indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, P. I., August 28, 1908.

Respectfully returned to the Purchasing Agent, Bureau of Supply, with the information that carbolic acid in red crystals will be a good substitute for crude carbolic acid.

A. J. McLAUGHLIN,
Acting Director of Health.

OFFICE OF THE BUREAU OF SUPPLY,
Manila, P. I., September 22, 1908.

SIR: I beg to forward the following report of the action of the Bureau of Supply in the matter of orders for carbolic acid since May 1, 1908, for your information.

	Crude 100 per cent (gallons).	Crystals (pounds).	Due to arrive.	Arrived.
On hand May 31, stock-----	1,200	2,350		
Ordered:				
May 27, cable, Japan-----		5,600		July 16.
June 12, cable, United States-----	1,200		Sept. 24-----	
July 16, mail, United States-----	1,200		Nov. 1-----	
July 16, cable, Japan-----		5,600		Sept. 8.
Aug. 29, cable, Japan-----		11,200	Oct. 4-----	
Sept. 18, cable, Japan-----		11,200	Oct. 4-----	
	3,600	35,920	359.5 drums.	

Your attention is invited to the fact that the annual estimate of the Board of Health for the fiscal year July 1, 1908, to June 30, 1909, calls for only one hundred drums crystal and three thousand gallons crude carbolic acid. This estimate is dated July 24, reached this office July 31 and carries a chit, "Dr. Heiser requests that no action be taken on this estimate until he advises by mail from the United States."

No advice has yet been received. What action shall we take?

Very respectfully,

E. G. SHIELDS, *Purchasing Agent.*

BUREAU OF HEALTH, *Manila, P. I.*

[First indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, P. I., September 22, 1908.

Respectfully forwarded to the honorable, the Secretary of the Interior, requesting that, in view of the present emergency, authority be given to disregard the message left by Dr. Heiser in order that the Bureau may be supplied with the articles and supplies necessary.

A. J. McLAUGHLIN,
Acting Director of Health.

[Second indorsement.]

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
DEPARTMENT OF THE INTERIOR,
Manila, September 23, 1908.

Respectfully returned to the Acting Director of Health.

In meeting the present emergency the Acting Director of Health will order such supplies and take such steps as he deems necessary, regardless of any instructions which may have been left for him. Such instructions it is presumed did not contemplate the arising of an emergency like the present one.

Where it seems advisable to go in direct opposition to instructions which have been left by the Director of Health, it would doubtless be well for the Acting Director to consult with the undersigned if there is opportunity, but the important thing is that what is deemed to be necessary should be done IMMEDIATELY without any loss of time whatever, and the Acting Director of Health will be supported in such cases by the undersigned.

DEAN C. WORCESTER,
Secretary of the Interior.

In point of fact Dr. Heiser with much difficulty and delay sometime since secured a kind of carbolic acid which mixed well with water, did not stain, and was thus of especial value for disinfecting purposes. He ordered more of this, particularly impressing upon the Insular Purchasing Agent the necessity for obtaining the same article.

The acid which was received on this order was not of the same color as that requested, it did not mix well with water and it stained badly. There ensued a controversy between the Director of Health, the Insular Purchasing Agent and the shippers of the acid over the question as to whether it was or was not what had been ordered, and the placing of larger orders was delayed pending the discovery of a suitable source of

supply of the quality of acid required, which Dr. Heiser is seeking to find in the United States.

Although the stock of disinfectants kept on hand has not failed at any time during the epidemic to meet the needs as they arose, I am, nevertheless, of the opinion that a full year's advance supply should be kept constantly on hand by the Insular Purchasing Agent to guard against a possible emergency.

SUBORDINATE FORCE EMPLOYED.

Relative to the force of men employed during this epidemic: On September 15, 105 extra men were employed, and this number was increased until 615 natives were on the roll with 36 additional white inspectors who were in charge of disinfecting gangs and of men throwing lime, using water wagons for disinfectants, etc. In addition to these about 300 men were furnished by the city for ditching, draining, and general cleaning up. Some 200 Constabulary were detailed for quarantine guards, and the regular house-to-house inspection was made by policemen. All these in addition to the regular Bureau of Health force.

UNSANITARY CONDITIONS IN MANILA.

The attitude of the municipal officials has been so friendly and helpful throughout the present epidemic that it is with regret that I find myself compelled to call attention to certain particulars in which I feel that they have failed properly to perform their duty prior to the present outbreak.

It will be remembered that under the division of powers finally determined upon it was intended to authorize the Bureau of Health to determine in general what sanitary work ought to be performed and how it should be done, while the city was charged with the responsibility of properly performing it. Under this arrangement the disposition of refuse and night soil was turned over to the city, and I am glad to say that under the supervision of the present highly competent chief of the department of sanitation and transportation, Mr. Mehan, this work has, in my opinion, been performed even better than when it was done by the Board of Health. I regret that I can not make a similar statement relative to the sanitary inspection of buildings under construction.

The provisions of law intended to secure proper light and ventilation in and around buildings were originally incorporated in the Sanitary Code and had they remained there could have been modified or repealed only by the Director of Health with the approval of the Secretary of the Interior.

By mutual consent, however, they were cut out of the Sanitary Code

and incorporated in the building ordinance, no objection to this change being raised by the Bureau of Health for the reason that the provisions adopted were entirely satisfactory. One of them read as follows:

SEC. 142 (Ordinance No. 78). *Yard on inside lot*.—Behind every building hereafter to be erected when on inside lot, there shall be a yard extending across the entire width of the lot of a width of not less than three meters.

To anyone familiar with the horrible conditions which formerly existed in Manila through the crowding together of nipa shacks, or who realizes what destruction of buildings has been necessary in Honolulu and other cities, in order to get rid of bubonic plague, and why it is that the authorities of Hongkong must continue to face an annual epidemic of plague until they destroy property of enormous value, it would seem axiomatic that we should guard against the creating of similar conditions in Manila by failure so to group and construct buildings as to afford free access to those two greatest of disinfectants, *sunshine and fresh air*, yet on August 22, 1907, the Municipal Board finally repealed this provision. The following correspondence ensued:

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, August 26, 1907.

To the honorable the SECRETARY OF THE INTERIOR, *Manila*.

SIR: I have the honor to call your attention to the fact that a sanitary ordinance regulation for the purpose of securing light and ventilation, as expressed in section 142 of Municipal Ordinance 78, was repealed August 22, 1907, by the Municipal Board, without this office having been given a hearing or even having been notified that such was the intention, and furthermore, without the consent of the Governor-General, who, by inference, under the provisions of Act No. 1150, is arbiter in such cases.

While the section cited is not in the Sanitary Code, it is none the less a most important sanitary regulation, and was omitted from the former by mutual consent, as well as other similar regulations, in order to avoid unnecessary duplication by including such regulations in both Building and Sanitary Codes.

Section 142 of Ordinance 78 was primarily aimed against plague and other filth diseases, which require light and air for their successful eradication. The very condition sought to be remedied by the repealed regulation is now being corrected by cities like Hongkong and Bombay with tremendous expense to the municipalities. In view of the foregoing, I respectfully protest against the action of the Municipal Board as being illegal and extraordinary, and at the same time submit the repealed section for reenactment as a sanitary regulation, in accordance with the provisions of Act 1150, for the following reasons:

1. To secure ventilation and light, the need of which may be observed in the business houses on the Escolta, where there are no facilities for through currents of air.

2. To permit the entrance of light, sunshine, and fresh air, which are the natural remedies against plague and similar diseases.

3. To save the city ultimately from the expense and trouble which has been forced upon such cities as Naples, Bombay, Calcutta, New York, and many other crowded centers of population throughout the civilized world by having to make such changes in buildings already constructed.

In view of the fact that the regulation referred to does not contemplate any

changes in existing buildings but simply applies to the construction which is to take place in the future, it is most earnestly requested that this regulation be forwarded to the Municipal Board, approved.

Very respectfully,

VICTOR G. HEISER, *Director of Health.*

[First indorsement.]

EXECUTIVE BUREAU.

Respectfully referred to the Municipal Board for such comment as it may desire to make.

Prompt return of these papers is desired.

J. F. SMITH, *Governor-General.*

[Second indorsement.]

CITY OF MANILA, MUNICIPAL BOARD.

Respectfully returned to the Governor-General, inviting his attention to sections 139, 140, and 143, and especially to the last sentence of section 139 of Ordinance No. 78, from which it will be seen that ample provision is made for light and ventilation.

The Board considered carefully the matter before the repeal of section 142 was effected.

What brought the matter sharply to the Board's attention was the insistence on the part of the health authorities that the section should be rigidly enforced, and a three-meter strip left vacant behind all houses, houses being construed to mean, not only the main building, but the outhouses as well. A person desiring to build a house with a detached kitchen and a detached stable would be required, under the ruling of the health authorities, to leave free three three-meter strips, which the Board thinks is an unnecessary hardship.

By direction of the Board:

JNO. M. TUTHER, *Secretary.*

[Third indorsement.]

EXECUTIVE BUREAU, MANILA.

Respectfully returned to the Director of Health, inviting attention to the second indorsement.

If the interpretation placed upon section 142, Ordinance No. 78, is correct, it would appear that such an interpretation would cause unnecessary hardship.

JAMES F. SMITH,

Acting Secretary of the Interior.

As open violations of the Sanitary Code and the building ordinance continued, the Director of Health addressed a letter to me on the subject on May 14, 1908. This letter and its indorsements clearly exemplify the difficulties thrown in the way of the Bureau of Health by the city engineer's office, and I invite special attention thereto:

The honorable the SECRETARY OF THE INTERIOR,

Baguio, Benguet.

SIR: I have the honor to invite attention to the fact that the attitude of the Municipal Board and of its agents in permitting the erection of buildings and other structures in the city of Manila which are in direct violation of the sanitary ordinances will probably result in much hardship to persons who are having construction work done and also seriously interfere with the sanitary improvement of the city. It will perhaps be remembered that many of the

provisions which pertained to light, ventilation, and sanitary construction which originally were included in the Sanitary Code submitted by this office, were, by mutual consent, transferred to the Building Code in order to avoid unnecessary duplication of ordinances, but in transferring such sections it was explicitly understood between the Municipal Board and the Bureau of Health that the latter did not lose any of the rights and privileges which were given to it by the provisions of Act No. 1150. Notwithstanding this, the Municipal Board denies the right of the Bureau of Health to interpret the sanitary sections of the Building Code.

The attitude of the Municipal Board is probably more clearly shown by quoting a resolution passed by it on September 11, 1907:

"Resolved, That it is the sense of the Board that the interpretation of all building ordinances is the exclusive function of the Municipal Board."

And again by the repeal on August 27, 1907, of section 142 of Ordinance 78, *without the Secretary of the Interior or this office having been given a hearing or even being notified that such was the intention, and, furthermore, without the consent of the Governor-General, who by inference under the provisions of Act No. 1150 is arbiter in such cases.*

It is contended by the undersigned that a sanitary ordinance in accordance with existing law must be prepared in the office of the Bureau of Health, submitted to the Secretary of the Interior, and if approved by him it must be sent to the Municipal Board for enactment; but if the latter body refuses to enact the same, the ordinance must be returned to the Bureau of Health for further consideration, and if the Bureau of Health refuses to change the same the matter must be laid before the Governor-General for final decision. In view of the method of enacting an ordinance it is contended that an ordinance can not be repealed unless the same parties who are responsible for its enactment concur in its repeal.

In order to bring this matter to your attention in concrete form and to show that house owners and others will be subjected to unnecessary expense owing to the office of the city engineer approving plans which are in direct violation of the sanitary ordinances of the city, I respectfully submit the following instances which have recently occurred.

104 interior, Concepcion, Ermita.—Plan approved by the superintendent of buildings, July 19, 1907. Cemented places are already badly broken, the mortar being largely composed of lime which is a violation of section 9, Ordinance 86, and also probably of section 99 of Ordinance 78.

161 to 187 Arranque, Santa Cruz.—Plans approved by the superintendent of buildings July 18, 1907; modified plumbing plans approved by the city engineer November 27, 1907. House drain which runs through four tenements or accessories has a grade of 1 to 106, and another drain which runs through five tenements or accessories has a grade of 1 to 225, which is in violation of section 28 of Ordinance 86 (Sanitary Code) which specifically states that the grade shall not be less than 1 to 50.

164 Azcarraga.—Plans approved by the city engineer December 3, 1907, show kitchens have head rooms of only $2\frac{1}{2}$ meters, which is in violation of section 146 of Ordinance 78, which prescribes that no room shall be less than 3 meters in height. The above structure is now nearing completion along the above lines.

193 Romero Aquino, San Sebastian.—Construction approved by the superintendent of buildings on August 9, 1907. The concrete floor of this building is on the same level or below that of the sidewalk, which is a violation of section 1 of Ordinance 89, which states that the level of the ground below and within any

building hereafter erected and intended for human habitation shall not be less than 15 centimeters above the established sidewalk grade at the established building line.

The foregoing are only a few of the instances which are constantly coming to the attention of this Bureau, and it is obvious that the Government is placed in a most unenviable position when one Department approves the construction of a building and later when the owner has gone to the trouble and expense of erecting the same, to have another Department of the Government inform him that it does not comply with the law and he will have to make alterations, all of which may cost considerable sums of money and cause him unnecessary loss and hardship.

In order to obviate conflicting constructions of this kind in the future it is respectfully recommended that the Municipal Board or its agents either be compelled to comply with the requirements of law or that plans and specifications of buildings be not sent out as approved until they have been examined and found satisfactory by this office. Furthermore, it is also respectfully requested that the necessary steps be taken to declare the action of the Municipal Board of August 22, 1907, repealing section 142 of Ordinance 78, illegal and restore this section as it originally stood. *The importance of this matter will perhaps be appreciated when it is remembered that many of the large cities of the world are now engaged at heavy expense in providing air-spaces in crowded sections of the built-up portion of the cities, and that by taking the action as suggested at this time a heavy burden may be saved the city of Manila in the future.*

Very respectfully,

VICTOR G. HEISER,
Director of Health.

[First indorsement.]

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
DEPARTMENT OF THE INTERIOR.

Respectfully forwarded to the Honorable James F. Smith, Governor-General, inviting attention to the extraordinary attitude assumed by the Municipal Board, as set forth in the inclosed communication from the Director of Health.

The undersigned concurs in the opinion of the Director of Health as to the impropriety and illegality of the action of the Board and requests that steps be taken which will effectively remedy the existing condition.

If sanitary ordinances which are passed at present in a manner involving much delay, but which allow the fullest hearing for all persons interested, are to be set aside in this manner by the Municipal Board, it will cease to be possible for the Director of Health to exercise any effective control over health conditions in the city of Manila.

The conditions tending to permanent infection with bubonic plague which exist in the neighboring colony of Hongkong should afford a sufficient object lesson as to the dangers of allowing the erection of buildings in violation of the provisions of our Sanitary Code. This matter is of the utmost importance as it is easy gradually to improve conditions by proper care in connection with the construction of new buildings, while it is both difficult and very expensive to remedy bad hygienic conditions brought about by improper construction.

We should by all means avoid cause for such radical action as was found necessary in Honolulu, where, as the Governor-General will remember, it was necessary to order the wholesale destruction of buildings in order to eradicate the bubonic plague.

Very respectfully,

DEAN C. WORCESTER,
Secretary of the Interior.

[Second indorsement.]

EXECUTIVE BUREAU, BAGUIO.

Respectfully referred to the Municipal Board, requesting a report.

JAMES F. SMITH, *Governor-General*.

[Third indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,
SECRETARY'S OFFICE.

Respectfully referred to the city engineer, for report.

By direction of the Board:

G. S. LANE, *Acting Secretary*.

[Fourth indorsement.]

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,
OFFICE OF CITY ENGINEER.

Respectfully returned to the Secretary of the Municipal Board, inviting attention to the following facts leading up to the complaint of the Director of Health:

On August 6, 1907, the Acting Director of Health requested that building permits be withheld until plans had been passed upon by that Bureau, and a somewhat extensive correspondence ensued, which led the Board to adopt the resolution of September 11, 1907, subject of the first complaint in the Director's letter of May 14, 1908.

The questions touched upon in this correspondence were all protests on the part of the sanitary engineer, and the Board in its resolutions showed that it considered the points at issue were not of sufficient importance to warrant a change in the wording of article 3, Ordinance 78.

In reply to the various complaints raised by the Director against the following permits that have been issued by this department, I beg to call attention to each one specifically, as follows:

104 interior, Concepcion, Ermita.—This department does everything possible to secure for the owners of buildings protection in respect to material employed by the contractors, but it stands to reason that a force of fifty inspectors would not be sufficient to enable us to place one man constantly inspecting each building in the course of construction. It is so easy for a contractor to substitute poor material in the mixing of concrete, that it would be impossible for this department to prevent such substitution in all cases.

161 Calle Arranque, Santa Cruz.—The plumbing plans of this building were of such a nature that it was found necessary to assign an assistant engineer to lay out the grades for the plumbing installation, and an expert on those lines set the stakes to which the contractor conformed in the construction. The house drain as it was staked out has not a grade of 1 to 106, as stated by the Director of Health, nor is there a drain with a grade of 1 to 225, as also stated by him. The plans submitted show clearly the elevations of stakes set; said elevations being referred to city datum. There is one line in which the grade does not quite conform to the Sanitary Code, the grade being 1 in 55. In all other grades in this building the grades are 1 in 50 or steeper. A copy of this plan was sent to the Director of Health in the usual way, with the elevations plainly marked thereon.

164 Azcarraga.—A reference to the building ordinance will show that the 3-meter head room is demanded in rooms. Section 146 and section 148, Ordinance 89, construes the word "cubicle" or "room" to mean and include any space for

occupancy or use, inclosed on all sides by walls or partitions more than 2 meters in height. I knew of no case in which permission has been granted to construct a kitchen of less than 3 meters in height, when such kitchen, by being inclosed on all sides, came within the above definition. *It has been the custom of the department to consider a kitchen open on one or more sides as being outside of the definition of a room, and therefore not subject to the provision for the minimum height of 3 meters. If error has been made in this particular, the Bureau of Health has passed scores of such without comment.*

193 Romero Aquino.—In this case also the Bureau of Health has demanded something not required by the ordinance. Section 1, Ordinance 89, states: "The level of the ground below and within any building hereafter erected *and intended for human habitation* shall not be less than fifteen centimeters above the established sidewalk grade at the established building line." *The building in question was designed, and permit issued for a tienda, with its deposito, as shown on the plan, copy of which was forwarded in due course to the Director of Health; and, if the Bureau of Health has permitted this building to be occupied for human habitation, the fault lies with it, and not with this department, which has no authority under any of the provisions of the Building or Sanitary Code over the occupation of houses once constructed.* In the case of certain houses erected on Calle Santa Mesa mezzanine floors were constructed under permit granted by this department, and every attempt possible was made to prevent the inmates of the building from using these floors for habitation. The Bureau of Health can inform the Board with more accuracy than I can what has been accomplished.

If all the instances of complaint formed by the Bureau of Health are of the same nature as the foregoing, they would appear to warrant but little attention, nor furnish ground for complaint.

Relative to the action of the Board in repealing section 142, Ordinance 78, attention is respectfully invited to the fact that in each instance where protest was made by the owner of the premises against the action of the city engineer in requiring that the 3-meter strip be left vacant, the Bureau of Health was requested to signify its acceptance or otherwise of the protest.

In the case of the building known as "La Puerta del Sol," the authority of the Bureau of Health permitted the occupancy of the strip in question, and the same was true of the extensive repairs made to the Watson building in the Escolta. *The action of the Board was taken when it was shown conclusively that the intention of the Bureau of Health was to force the city to acquire by purchase (its only remedy) a strip of land throughout each block in the entire city 3 meters wide in the rear of every house. The decision of the Supreme Court relative to the 3-meter strip along the esteros had recently been rendered, and the city was confronted by the necessity of expending unlimited thousands of pesos to carry out the desire of the Director of Health.*

I respectfully submit to the attention of the Board the fact that such repeal was absolutely necessary in view of the decision of the Director to demand its enforcement, as outlined in the letter of the sanitary engineer, demanding its enforcement in the case of the property on Calle Morrones, Tondo, where the 3-meter strip was demanded behind the stables.

If section 142, Ordinance 78, is to be reënacted and enforced the city of Manila must be ready to expropriate a portion of every lot where it is proposed to erect a building in the future, and I hesitate to suggest what portion of the city's income would be required to stand the strain. I fear at least 100 per cent.

Very respectfully,

W. P. WYLIE, City Engineer.

[Fifth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,

June 27, 1908.

Respectfully returned to the honorable the Governor-General, inviting his attention to the report of the city engineer given in the inclosure to the fourth indorsement hereon, this having been adopted as the sense of the Board.

By direction of the Board:

G. S. LANE, *Acting Secretary.*

[Sixth indorsement.]

EXECUTIVE BUREAU,

June 29, 1908.

Respectfully returned to the Director of Health, inviting attention to the fifth indorsement.

JAMES F. SMITH, *Governor-General.*

[Seventh indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,

Manila, August 3, 1908.

Respectfully returned to his excellency the Governor-General of the Philippine Islands, through the honorable the Secretary of the Interior, with the statement that as the fourth indorsement written by the city engineer (and adopted by the Municipal Board) in comment on a communication from this office, dated May 14, 1908, addressed to the Secretary of the Interior, *advances practically no explanation of the violations of the sanitary ordinances to which attention was called, it is deemed expedient to submit the following:*

(a) The first item, referring to 104 interior, Calle Concepción, Ermita, is passed with no remark other than to say that while the mixing of cement mortar undoubtedly offers opportunities for substitution, there are standard methods by which the character of the concrete can be determined before the work is approved. This is one of the principal reasons for expert inspections.

(b) In further support of the contention of this office that the grades of the drains at 161 to 187 Calle Arranque, Santa Cruz, are insufficient, and do not conform to legal requirements, "Exhibit A" is respectfully submitted, the same being a report of a survey made by the Bureau of Public Works at the request of the Director of Health in order to determine whether the sanitary engineer of this Bureau was in error, as alleged by the fourth indorsement, in stating that the grades referred to were 1 to 106 and 1 to 225, instead of 1 to 50 as they should have been. *It will be observed that this report practically confirms and substantiates the statements contained in the letter heretofore cited; and furthermore, that the drawings made by the Bureau of Public Works of the said premises show that in certain parts of the drain in the rear of the houses the water is actually expected to run uphill. That it refuses to do so has been attested by recent inspections which disclose that it has become stagnant and foul in the very drains which should carry it away, yet the work has been approved by the city engineer's office and presumably the contractor has been paid, thus leaving the owner no redress and restricting this office to one of two things, either of which would be wrong and constitute a just ground for protest—that is, to compel the owner of the property to have the work done over or to permit a remediable insanitary condition to go unheeded.*

(c) *In the matter of the 2½-meter ceiling at No. 164 Calle Azcarraga, instead of 3 meters as required by law, and which is defended on the ground that all sides of the room are not inclosed by walls or partitions, it is respectfully sub-*

mitted that if it would require a force of fifty inspectors to keep the few contractors in the city of Manila from improperly mixing their cement, undoubtedly many times that number would be needed to prevent the occupants of such places as are here referred to from insidiously closing up the open sides of structures of this class. Such things do happen, and experience has shown that the best way to make sure of proper ventilation is to provide for it in the first place so that it will not depend on a contingency.

(d) The whole question involved in the controversy in regard to 193 Calle Romero Aquino depends on the construction placed on the phrase "intended for human habitation." No evidence is necessary to prove that *tiendas* are often used as places of human habitation and there is no remedy for it at present. Rents are high and small houses within the reach of the poorer classes are scarce; to drive the occupants from such places would simply compel them to seek shelter in the already overcrowded tenement houses, hence it is better to permit the lesser of the two evils, and hold that such structures are to be places of human habitation.

(e) The contention of this office that the same method must be adhered to in repealing an ordinance coming within the provisions of Act 1150 authorizing the Sanitary Code for the city of Manila as is legally required in enacting the same has not been refuted. The Act cited is very explicit as to the course a proposed sanitary ordinance or an amendment must take before passage, and inasmuch as a partial repeal often has the effect of an amendment, as it did in the case of section 142, Ordinance 78, it would seem that it would require more than a resolution stating "that it is the sense of the Board that the interpretation of all building ordinances is exclusively the function of the Municipal Board" to legalize the action to which exception has been taken. The part of the building ordinance which was repealed was originally incorporated in the proposed sanitary code but was transferred to the building ordinance in order to avoid duplication and for convenience, it being understood at the time that the sanitary status of the same was to be in no wise disturbed or affected. These facts are submitted without regard to the merits of the repealed ordinance itself, but in support of the position taken by this office that the Municipal Board of the city of Manila can not legally repeal any ordinance passed in pursuance of Act 1150 except such repeal shall take the course definitely prescribed by the said Act. If this is not true, the original law forming the basis of the Sanitary Code is practically rendered null and void by its own limitations.

(f) The argument advanced by the city engineer that even if construction work is approved by his office, which is in violation of law, the fault does not lie with him, but with the Director of Health for permitting people to live in such buildings, after he has permitted their illegal construction, is, of course, so unsound as not to require any comment. As stated in the original communication, it places the Government in a most unenviable position when one branch allows construction in violation of the law, and another branch of the Government comes along later and informs the people that the same is illegal and can not be permitted to stand, thereby causing unnecessary expense to persons who make repairs and construct new buildings in the city.

The Director of Health desires the coöperation of the city engineer and wishes to coöperate with him. As is well known, it is difficult enough to carry out the law with regard to sanitary measures without having another official of the Government constantly seeking loopholes and aiding persons to evade the law. Only recently there was presented the anomalous spectacle of the city engineer appearing in court (*Municipal Court, May 9, 1908, Bureau of Health vs. Crisanto Bautista—Exhibit B*) and testifying in behalf of a defendant against whom

this Bureau had brought action for violation of a sanitary ordinance. Again in the case of a large addition which was recently built by N. T. Hashim to the Grand Opera House to be used as a tailor shop, the city engineer refuses to compel the compliance with section 9 of Ordinance 86 and section 1 of Ordinance 89, on the ground that the building is not used for human habitation; yet at least 35 employees have been observed to work therein, and there is ample evidence that persons sleep there also. (Exhibit C.)

This office also believes that it was the intention of the Commission when it enacted Act 1150 that the Municipal Board through its agents should enforce the sanitary ordinances which pertain to construction and when they are not enforced that it is the duty of the Director of Health to bring the matter to the attention of his superiors.

The hope of the city so far as structural sanitation is concerned lies in enforcing the ordinances. They may seem unnecessary and oppressive now, but it should be remembered that they are made for the future as well as for the present. It would not be so much of a hardship to require a three meter space around buildings being constructed at the present time as to burn the same buildings a few years later in combating an epidemic of plague.

There are two old sayings that are applicable to the question of enforcing the laws for public sanitation; one is that the best way to secure the repeal of a bad law is to enforce it; the other is that the best time to prepare for war is when peace prevails.

Manila has been very fortunate in escaping a general epidemic of plague; it may not be always so fortunate, and the time to begin a crusade against this horrible disease is before it makes its appearance. If it never comes and the ventilation policy is adopted, the people will have all the more reason for appreciating the blessings of fresh air and unobstructed sunshine and could rest assured that their homes would not be destroyed.

Briefly then, in conclusion, it is believed that the facts as set forth in these papers show clearly that many sanitary ordinances are not being enforced, and it is hoped that it may be seen that success lies only in mutual coöperation.

V. G. HEISER, *Director of Health.*

EXHIBIT A.

DEPARTMENT OF COMMERCE AND POLICE,

BUREAU OF PUBLIC WORKS,

Manila, July 28, 1908.

SIR: In reply to your favor of the 1st instant (R. P.-210), I have the honor to inclose two drawings showing profile of drains at rear of houses 161 to 167 and 173 to 187 Calle Arranque, as obtained by this Bureau. House 169 was unoccupied and locked and our representative was unable to get in.

Average grade of drain behind 173 to 187 is 0.523 per cent (F. S. C.), and it will be noticed there is a sharp turn in the drain. The drain behind 161 to 167 has an average of 0.96 per cent. An architect's level mounted on the wall with a trivet was used for this work.

Very respectfully,

J. W. BEARDSLEY,

Director of Public Works.

To the DIRECTOR, BUREAU OF HEALTH, Manila, P. I.

Enc.: Two drawings.

EXHIBIT B.

DEPARTMENT OF THE INTERIOR,
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS,
Manila, August 3, 1908.

The DIRECTOR OF HEALTH, Manila.

SIR: I have the honor to report that on the night of August 1, 1908, accompanied by policeman No. 78, Bonifacio Mamaril, I counted seven persons domiciled or sleeping in the new tailor shop recently erected by Mr. Hashim, as an addition to the Grand Opera Houses on Calle Cervantes. On this date active tailoring operations had been temporarily suspended, pending the active commencement on a new Federal Government tailoring contract.

The present occupants stated that when the shop was in full operation, the number of persons sleeping in this building was between 80 and 120 every night. They sleep on the wooden floor only a few inches above the low wet ground under the boards. This ground under the building presents ideal conditions for the breeding of mosquitoes.

Very respectfully,

GEO. H. GUERDRUM,
Chief, Division of Sanitary Engineering.

EXHIBIT C.

MANILA, August 3, 1908.

The DIRECTOR OF HEALTH, Manila.

SIR: I have the honor to report that on or about December 1, 1907, I encountered approximately 40 persons domiciled and sleeping in the new tailor shop recently erected by Mr. Hashim as an addition to the Grand Opera House on Calle Cervantes.

Very respectfully,

WILLIAM P. PAULY, Sanitary Inspector.

[Eighth indorsement.]

AUGUST 7, 1908.

Respectfully referred to the Honorable James F. Smith, Governor-General, inviting especial attention to the within statement of facts by the Director of Health and the report from the office of the Director of Public Works, from which it appears that the city engineer is deliberately permitting violations of many existing health ordinances.

It will be easy to convert Manila gradually into a healthful city if ordinances are steadily enforced.

The continuance of such a policy as is now being carried out by the Municipal Board and the city engineer will result in the creation of an unsanitary city which will ultimately lead to a great epidemic necessitating the destruction of property of great value as has so often occurred in other cities in the past.

This office is powerless to remedy these conditions and appeals to the Governor-General to inform the Municipal Board definitely as to its powers in the matter of repealing health ordinances and as to its duties relative to their enforcement.

Neither the Secretary of the Interior nor the Director of Health can assume responsibility for health conditions of this city unless the present attitude of the authorities above referred to is promptly changed.

DEAN C. WORCESTER,
Secretary of the Interior.

[Ninth indorsement.]

EXECUTIVE BUREAU,

August 12, 1908.

Respectfully referred to the Municipal Board, Manila. *Some explanation is desired from the city engineer touching the violation of health ordinances. It appears from the statement of the Director of Health and from that of the Director of Public Works that the city engineer is permitting violations of these ordinances. If these statements are true, it discloses a most surprising condition, which may subject both the city engineer and the Municipal Board, which exercises immediate supervision over the city engineer, to severe criticism.*

JAMES F. SMITH, Governor-General.

[Tenth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,

September 11, 1908.

Respectfully returned to the honorable the Governor-General, inviting attention to the inclosed reports of the committee on law and the city engineer, which have been adopted as the opinion of the Board.

By direction of the Board:

H. L. FISHER, Secretary.

Inclosure.

REPORT.

CITY OF MANILA,

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,

OFFICE OF CITY ENGINEER,

September 3, 1908.

Respectfully returned to the Secretary of the Municipal Board with the following statements relative to the two remaining complaints of the Director of Health relative to alleged violations, by this office, of the Sanitary Code.

Attention is respectfully invited to the fact that the personnel of this office devoted to the inspection of buildings, including examination of plans, etc., consists of a chief inspector (American) and four assistants (Filipinos).

This force during the fiscal year 1908 made inspections on 5,864 applications, of which 1,570 were for construction and 4,294 for repairs, besides 400 miscellaneous permits. In the case of construction, frequent visits are necessary throughout a period sometimes covering several months.

It will, therefore, be seen that this force is taxed to its utmost, and that it is physically impossible to watch every move made by every contractor engaged on these buildings.

In the case of the tenement buildings on Calle Arranque, the soil pipe has been constructed in strict conformity—the fourth herewith—and the drain mentioned by the Bureau of Health and also by the Bureau of Public Works is not a “drain” in acceptance of the term laid down in the ordinance as requiring a grade of 1 in 50, but is merely an open cement-lined gutter carrying away rain water and such other waters as accumulate on the floors of a number of kitchens. Incidentally, the inmates of these premises are apparently permitted to prepare their food for cooking on the kitchen floor, the evidence existing in the fact of fish heads, chicken entrails, rice, etc., all of which comes under the head of garbage, for which the ordinance demands that certain tightly closed iron receptacles shall be provided.

This type of tenement construction seems to be in greater demand than any other class of construction in the hard-material district, in view of which fact standard designs will be necessary, so that builders and architects may know

what is required of them, and until such types are prepared, it would seem that we have not given prospective builders sufficient instruction as to how these matters shall be cared for.

Ordinance 86 states that drain pipes shall be of cast iron, in which case a grade of 1 in 50 is necessary and is required; *but where an open gutter of cement, easily accessible to brooms and easily flushed, is constructed, a grade of 1 in 50 is not necessary, and is not demanded by the code.*

If cement-lined gutters are to be carried to a particular grade, and this department is to furnish the grade stakes, and see that the work is carried out to those stakes, a much larger personnel will be necessary, and the force of inspectors must be quadrupled at least.

Every contractor, however, who is capable of undertaking such work as the construction of tenement buildings in Calle Arranque, must necessarily know about gutters, grades, etc., to be responsible for any faulty work of this nature to the owner of the premises.

Calle Romero Aquino.—In this case, as stated in the seventh indorsement, the question bears upon the construction placed on the phrase "intended for human habitation."

If tiendas of all classes are to be constructed with all the appurtenances of buildings for human habitation, it requires only a fiat to that effect from the Bureau of Health, and all future applications for permits to erect such tiendas will be accompanied by plans showing all the sanitary arrangements demanded by the code.

One other explanation seems to be necessary in answer to the seventh indorsement, viz:

The appearance in the municipal court on May 9, 1908, of the city engineer, testifying in behalf of a defendant against whom the Bureau had brought action for violation of the sanitary ordinance. When the original order was issued against the defendant it followed the original custom of being sent to the city engineer who issued it over his signature. That order called for the construction of a gutter or drain from the septic tank to the estero. On its receipt the defendant personally appeared in the office of the city engineer and showed that he had no legal right to construct the gutter ordered, as it would have to pass through the property of another party, who had absolutely refused such permission, on the grounds that it would kill his zacate. Under the circumstances, there was nothing to do but withdraw the illegal order, as the city engineer certainly has no right to order a private individual to infringe upon the rights of another private individual.

Very shortly after this action was taken the Bureau of Health recognizing the fact that the city engineer's office was unable to handle the enormous amount of sanitary orders coming in, requested that all orders pending be returned to the Bureau for necessary action.

I am not sure whether note was made in each case where any modification of an order had been made, but it was the intention and desire of this office to inform the Bureau of Health of the condition of each order. I am of the opinion that the Bureau was notified of this action of the city engineer.

In conclusion, I beg to state that conferences with the Director of Health indicate, without any doubt, that the points of difference between the departments refer only to questions of the meaning of the ordinances.

There has never been any desire in this office to do more than comply strictly with the ordinances, and interpretations are frequently requested of the Board and of the Director of Health.

It would seem that instead of recriminations, harsh language, and worse

inuendoes, a simple conference between the heads of the departments would be productive of much more satisfactory service, to say nothing of the time wasted in investigating and reinvestigating, and writing indorsements on matters that can be settled by a five minutes' conference. Such a method will, in the future, be adopted by this department when a question of interpretation arises.

Very respectfully,

W. P. WYLIE, *City Engineer.*

[In re File No. 9006, Construction of buildings in alleged violation of the Sanitary Code.]

COMMITTEE REPORT.

SEPTEMBER 10, 1908.

The MUNICIPAL BOARD, *Manila, P. I.*

GENTLEMEN: This matter has been referred to your committee for the sole purposes of reporting on the legal point brought up in paragraph (e) of the letter of the Director of Health, dated August 5, 1908.

The Director of Health contends that Ordinance No. 78 regarding construction, should be considered as a part of the "Sanitary Code," and as such can not be amended except in accordance with the provisions of Act No. 1150. This opinion is based on the fact that the original draft of the Sanitary Code contained provisions regarding the construction of buildings—that is to say, provisions analogous to those in Ordinance No. 78, and which, in order to avoid a duplication of provisions treating of the same subject, were eliminated from the Sanitary Code when this was discussed by the Municipal Board.

It is a fact that, in the original draft of the Sanitary Code, there were included certain provisions with reference to the construction of buildings, analogous to those already in force in Ordinance No. 78, and in view of this, the representative of the Bureau of Health, when discussing the proposed code before the Municipal Board, offered no objection to the elimination of said provisions from the Sanitary Code.

It is, however, not a fact that the Municipal Board, or any of its members, or the representative of the Director of Health, present at the discussion, had intended that the provisions of Ordinance No. 78, either as a whole or in part, should be interpreted as forming an integrant part of the Sanitary Code, nor that the status of said Ordinance No. 78 should be different from the status of any other ordinances.

Your committee personally sustained this part of the discussion and is perfectly convinced of what has just been written. This being established, it is only natural that the Municipal Board should be the body to whom belongs the exclusive right to interpret Ordinance No. 78 in all its provisions.

Very respectfully,

COMMITTEE ON LAW.

ABSURD CONTENTION OF THE CITY ENGINEER RELATIVE TO PAYMENT FOR STRIPS OF LAND LEFT VACANT FOR VENTILATION.

In the fourth indorsement on this communication the city engineer advances the extraordinary theory that the city might be compelled to pay for 3-meter strips at the backs of lots were it to forbid building thereon in order to prevent the creation of unsanitary conditions. This contention is absurd.

The case to which he refers as decided in the Supreme Court was one of *easement over a zone for public use*, while the case in question is

as to whether the owner of a piece of property shall be allowed to use it in such a way as to endanger the public health. The city could no more be compelled to pay for land which it obliged an owner to leave free from obstruction in order that light and air might enter and that the creation of unsanitary conditions dangerous not only to him and his family but to his neighbors might be avoided, than it could be compelled to pay for a lot in the center of the city because it refused to allow the erection of a tannery or a soap factory upon it.

The city has a right to protect itself against the creation of unsanitary conditions whether there is danger that such conditions will be brought about by the conducting of offensive occupations or by the erection of buildings which are improperly constructed or improperly located.

But the matter was not allowed to rest here. On August 20, 1908, the Director of Health wrote me the following letter:

MANILA, August 20, 1908.

The Honorable, the SECRETARY OF THE INTERIOR,

Manila, P. I.

SIR: I have the honor to invite attention herewith to the recent construction of a small hard-material house in Palomar, district of Tondo, which as a type, being built under a permit, with the apparent full consent and approval of the city building department, constitutes such a menace to the public health that it is believed a special protest is necessary in regard to the same. *The various defects indicated below are apparently covered by legalized evasions of the spirit of the law.*

The building referred to is, as stated, in Palomar near the city stables No. 2—Permit 6375, issued on June 15, 1908.

1. The floor of the structure is unpaved and is low and damp. (Sanitary Code, sec. 9.)

The very wise provisions of the Sanitary Code, of which this is a violation, is evaded by writing on the face of the permit "Not to be used as a human habitation." A sanitary inspector of the Bureau of Health has already gone through the farce of ordering the people to vacate the house as sleeping quarters. If it is vacated it is only a question of time until it will be again occupied. This little structure was erected by poor Filipinos who probably spent their entire savings or are perhaps even in debt for the building, and this office should not in justice to the Philippine people step in now and prosecute these people for sleeping in a building erected in good faith and supervised and approved by another branch of the government.

2. The structure is a scant 2 meters in height; if the ground surface had been filled in as required in section 1, Ordinance 89, the height of the building would be very considerably reduced. Ordinance 78, section 148, requires that all rooms be 3 meters in height.

This is evaded by writing on the face of the permit "To be inclosed on three sides only," yet actually all that is needed to close up this fourth side, with the exception of a small slatted space below, is a hinged or sliding window across a portion of the front.

If this class of construction is permitted to proceed unchecked, the undersigned maintains that it will nullify many of the provisions of the two excellent ordinances now in force in this city, viz: the Sanitary Code and the Building Code. If a person cares to, he can follow the ordinances; if not, he may do as he pleases.

The structure opens the way for the construction of whole barrios of small, squatty, ill-ventilated and muddy-floored hovels, especially in the rear and interiors of the premises of larger houses facing the street. These interiors are now one of the most difficult problems with which this office has to contend; unlicensed repairs and constructions are daily going on in spite of the utmost efforts of this office, which is not equipped with a building department, but must combat these constructions as a sanitary measure in addition to its other health duties. If this construction is now to be legalized by the erection of such houses as the one on Palomar, this office will be handicapped to such an extent that effective sanitation and quick and rapid disinfection in case of cholera and other infectious diseases will be out of the question.

This communication is submitted in addition to and in connection with the previous report by the Director of Health on this same general subject, as this case does not involve careless construction or lax inspection, but involves approved construction, which if continued in will render two of the best ordinances of the city to a large extent noneffective.

Since the first part of this communication was drafted, the structure, due to verbal orders from the local health station, has finally been vacated as sleeping quarters. It is believed, however, that this does not render any less important the above report.

Very respectfully,

A. J. McLAUGHLIN,
Acting Director of Health.

[First indorsement.]

AUGUST 24, 1908.

Respectfully forwarded to the honorable, the Governor-General, inviting his attention to this further instance of the policy which is being pursued by the city engineer and other municipal authorities responsible for the supervision of building operations in the city of Manila.

In the opinion of the undersigned no question more intimately concerns the present and future safety of the people of Manila than does the one raised in this communication and the previous one on the same general subject, which has gone forward to the Governor-General, as to whether the municipal authorities of Manila are or are not to be allowed, in effect, to defeat the provisions of existing sanitary legislation for the city.

The deliberate neglect of some of the provisions of this legislation, and the willful evasion of others, are steadily contributing to the bringing about of conditions which will destroy the results of the work already accomplished for the improvement of health conditions in Manila and will render the city unsanitary.

The undersigned most strongly urges upon the Governor-General the taking of such action as will bring home to those concerned the importance of the proper enforcement of existing provisions of law.

DEAN C. WORCESTER, Secretary of the Interior.

[Second indorsement.]

EXECUTIVE BUREAU,
August 25, 1908.

Respectfully referred to the Municipal Board, Manila, in connection with Executive Bureau file 76352-A29, forwarded August 12, 1908. Prompt return of these papers with report is requested.

JAMES F. SMITH, Governor-General.

It is presumed that the report of the city engineer under date of September 9 was intended as a reply to this communication. There has been the following subsequent correspondence on this general subject:

MANILA, August 27, 1908.

Dr. A. J. McLAUGHLIN, *Acting Director of Health.*

SIR: In accordance with your verbal instructions, after an inspection of the recently erected structure at interior of 87 Calle Acciteros, San Nicolas, I have the honor to submit herewith the following data on the subject.

According to building permit No. 7365 exhibited on the premises, authority for this construction was granted Bernardino Padolit on July 30, 1908, by the department of engineering and public works; the permit reading "to construct two secondary buildings (dos edificios secundarios) to measure 8 by 3 meters each, one of hard material (materiales fuertes)."

Just why these should be called secondary buildings is not apparent, as each building harbors several families and is more in the nature of a tenement house.

In violation of the Building Code the structures are largely inclosed with sauali or cane matting. (Ordinance 78, sec. 80.)

In violation of the Sanitary Code the floors are unpaved, low and damp. (Ordinance 86, sec. 9.)

The occupants have no kitchens and are naturally cooking out in the open air. Due to the entire lack of drainage, slop water is thrown out anywhere on the ground and must inevitably breed very insanitary conditions.

Some relief from this class of new construction is respectfully requested, as it will be impossible gradually to improve the sanitary condition of Manila if new construction work can not conform to modern sanitary laws. Attention is invited to a previous communication in regard to a recent similar construction on Palomar.

Very respectfully,

GEO. H. GUERDRUM,

Chief, Division of Sanitary Engineering.

[First indorsement.]

BUREAU OF HEALTH,

Manila, August 29, 1908.

Respectfully referred to the honorable, the Secretary of the Interior, for his information, in connection with the matter of interpretation of Sanitary and Building Codes by the authorities of the city of Manila. It is the opinion of the undersigned that all new construction should conform rigidly to law. Whatever excuse there may be for exercising leniency in the matter of already existing old insanitary buildings, there is no excuse for deviating from the course laid down by law for new buildings, and such deviation tends to perpetuate the problem of insanitary housing.

A. J. McLAUGHLIN,

Acting Director of Health.

[Second indorsement.]

DEPARTMENT OF THE INTERIOR,

September 4, 1908.

Respectfully forwarded to the honorable the Governor-General, for consideration in connection with other papers on this same general subject previously forwarded.

DEAN C. WORCESTER, *Secretary of the Interior.*

[Third indorsement.]

EXECUTIVE BUREAU,

September 7, 1908.

Respectfully referred to the Municipal Board, Manila, requesting report.

JAMES F. SMITH, *Governor-General.*

SHALL WE BUILD A HEALTHFUL CITY?

Although we can not immediately remedy all unsanitary conditions arising from the low, swampy nature of much of the land in the city of Manila, nor destroy all the dark, damp, ill-ventilated buildings, we *can* strictly enforce reasonable building ordinances so as to insure the ultimate construction of a healthful city.

We are not doing this at the present time. Three times, within the past year, I have appealed to the Governor-General, calling attention to the danger of our present course in the strongest language I could command. No relief has thus far been secured. I can only say that the Secretary of the Interior and the Director of Health decline to assume responsibility for the results of conditions which they are powerless to remedy.

With regret I express the deliberate opinion that the sanitary condition of the city has for some time been growing steadily worse owing to the lax enforcement of the building ordinance, to the repeal of one of its very important provisions, to the failure of the city engineer's office to perform comparatively inexpensive drainage work, and to the neglect of many of the city streets. The existence of extensive areas which can be redeemed only by costly filling is a condition which is to be deplored but which can not immediately be remedied.

The lack of midden sheds for the poorer people of certain districts is a condition which can and should be remedied if funds are available, and if not available they should be provided.

Prior to the completion of a modern sewer system the city of Manila is dependent upon the pail system for the disposal of human excreta. In fact, *after* the completion of the sewer system there will still remain some districts which it will not reach or where the inhabitants can not afford to install modern water-closets.

The proper disposal of human excreta is a matter of vital importance. With these facts in view the Bureau of Health, while in charge of this work, forced the installation of midden sheds for the use of the poor to the limit of funds available for this purpose and repeatedly requested additional appropriations for this work.

Since the city has taken charge the Bureau has not ceased its efforts to secure increased facilities. Complaint has been made as to the conditions which exist and the Bureau of Health has been blamed for them. The following memorandum, report, and correspondence will suffice to show the attitude of the Bureau of Health and of the city authorities in this matter:

[Memorandum for the honorable the Secretary of the Interior relative to public closets and pails in the Sampaloc district.]

There are six public closets in this district, one in each of the barrios of Sulucan, Tuberias, Nagtajan, Loreto, Gastambide, and one at the market on

Calle Alix. In two barrios there are none, viz, Mangahan and Santa Clara. Both of these barrios are located so that there is no road running into them, and a pail wagon could not possibly reach the interior, where in one or two instances the barrio reaches nearly a mile from the nearest wagon road.

Various medical inspectors on duty in Sampaloc have endeavored to have streets cut in these districts, but as the opening of new streets must be considered in connection with other city necessities, this has not been done so far. Copy of a letter advocating a street into Mangahan is attached hereto. The medical inspector now on duty at Sampaloc states that the district including these two barrios contains a large number of individual pails, mostly in tiendas and small stores of different sorts. It has been possible to obtain the pails in these because of the licenses required—the license not being approved until the pail is installed. In the case of the ordinary householder there is no such means to force him to get a pail. In the cases of new constructions in the nipa district the medical inspector states that he invariably recommends “proper closet facilities” before the permit is approved. However, this recommendation seems to be a dead letter as the permit is issued and the house is occupied without a pail.

Where there are public closets installed they are used to a considerable extent by a select few. It can not be expected that the average nipa resident will walk from a hundred feet to a couple of blocks on a dark rainy night or a hot afternoon when there is long grass or a convenient estero near by, or he may use an ordinary chamber pot and throw the contents into the estero or wherever it is most convenient.

This problem has occupied the attention of this office for some time, as will be seen from the attached statement which has been prepared to cover the general question of public closets.

The number of cholera cases in the two barrios without closets were ten cases in Mangahan and seven cases in Santa Clara; five cases in Mangahan are attributed by the medical inspector to one direct infection, the remaining foci are scattered.

The whole question is one of many difficulties and its solution must contemplate a large expenditure of money for pails and closets, filling in of low lands, opening of streets, and, even after these are obtained, the most difficult problem will be to teach the people to use properly the facilities provided.

CHANDLER, *Chief Clerk.*

[Report.]

PUBLIC PAIL SHEDS.

With good drainage, strict supervision of building repair and construction, and a complete system of public closets, the poor districts of a large city, such as Manila, need not cause particular concern to the health authorities, but with a lack of enforcement of building and repair ordinances, lack of surface drainage and lack of public closet facilities, the poor districts of a large tropical city must be at all times a distinct menace to the public health. Realizing the importance of this, the undersigned has many times protested against the lax enforcement of building and repair ordinances throughout Manila, the lack of surface drainage, and the insufficient public closet facilities, and has endeavored to correct these deficiencies in spite of the attitude of the municipal authorities, with reference to the light, ventilation, and drainage sections of the building ordinances.

On May 15, 1906, one year before the undersigned took charge of this division, Dr. J. B. Long, passed assistant surgeon, U. S. P. H. and M. H. S., then Assistant Director of Health, requested of the Municipal Board that a chain of some 32

public pail sheds be erected and operated throughout the various districts of the city. However, by July, 1907, not one of these 32 requested installations had been put in.

Under date of September 27, 1907, relief was requested of the Municipal Board for the people living in Gagalañging, who had been ordered to supply themselves with pails, and who protested in a petition signed by 27 people, that they were too poor to buy the pails.

In compliance with their request the city installed two pail sheds in Gagalañging, one at No. 133 interior and one at No. 90 interior. Under date of October 23, 1907, midden sheds were requested and have now been installed in the following places:

District of Malate: Calle San Andres, 119 interior.

District of Malate: Calle Leveriza, 42 interior.

District of Malate: Calle Leveriza, 112 interior.

Tanduay District: Calle Castellanos, 66 interior.

Barrio of Nagtajan:

After some eighteen months, therefore, some 7 public pail sheds of a total of 38 requested have been installed.

Under date of May 29, 1908, the undersigned, realizing the pressing need of additional closets, and realizing also the difficulty of securing the erection of an adequate number, carefully revised the previous list made by Dr. Long, eliminating some of the requested installations, and adding others, and drafted a communication to the secretary of the Municipal Board, for the signature of the Director, in which the construction of 39 pail sheds was requested. This recommendation was referred by the Municipal Board to the city engineer for his consideration. Under date of August 4, 1908, this communication was referred to the Director of Health, inviting his attention to the amount appropriated by the Board for the erection of these sheds, viz, 4,500 pesos, and calling attention to the fact that the erection of all the sheds requested would cost in the neighborhood of 8,850 pesos. There being nothing else that this Bureau could do but accept the reduced appropriation of the Municipal Board, the communication was returned to the Secretary of the Municipal Board, with the indorsement that while this Bureau regretted that all of the public closets requested could not be built this year, the list was returned as requested, with the most important locations checked off in red ink.

The construction of public pail sheds is not expensive, and constitutes such an important item in the sanitation of a city that the most liberal provision in this regard should be made.

Due to lack of public pail sheds, the residents of the poor districts continually foul the esteros, construct various kinds of insanitary privy vaults, and are in general greatly retarding the health conditions of the city.

GEO. H. GUERDRUM, *Sanitary Engineer.*

STATION I, SAMPALOC,
January 23, 1908.

CHIEF, DIVISION OF SANITARY ENGINEERING,

Manila, P. I.

SIR: I have the honor to recommend that the city engineer be requested to open one or more roads or streets, through which vehicles may pass into the barrio of Mangahan, district of Sampaloc.

This barrio, according to the Bureau of Health census of 1907, has a population of 2,508 and there is no road or opening through which a vehicle of any kind may pass into this barrio.

The inhabitants throw their garbage and rubbish into the streets and vacant lots, claiming that the street cleaning department will remove them. Animals that die are thrown into the rice paddies in the rear of the barrio and there allowed to decay for the same reason.

In cases of cholera or other epidemic diseases, much delay has been caused by not being able to locate the residences, and on account of the ambulance not being able to pass into this barrio.

The pail system would be a greater success at this place if a street or streets were opened.

There are two places where streets could be easily opened with small cost: At No. 81 Calle Balic-Balic and at the continuation of Calle San Anton.

Very respectfully,

BENJ. L. BURDETTE, *Medical Inspector.*

[First indorsement.]

BUREAU OF HEALTH,

Manila, P. I., January 27, 1908.

Respectfully referred, through the Municipal Board, to the city engineer. This office concurs in the opinion of Medical Inspector Benjamin L. Burdette that a street into the barrio of Mangahan, Sampaloc, is badly needed.

VICTOR G. HEISER, *Director of Health.*

BAD STREETS AN OBSTACLE TO SANITARY WORK.

Another very serious obstacle to the successful carrying on of sanitary work has been the condition of the city streets.

This was necessarily bad at the time of the American occupation, owing to the upsetting of the municipal administration by war. The same cause contributed to a continuance of this condition during the early days of American rule and by the time it had become possible to repair the streets of the city the state of most of them was such as to make it necessary to dig them up and practically to rebuild them. There followed the building of a new street railway, the installation of underground telephone cables and the construction of new water and sewer systems. The result has been that the streets of the city have been constantly torn up and the filth which underlies them has been continually brought to the surface. That the digging up of the streets has not been an important source of active cholera infection is shown by the infrequency of cases among the men actually engaged in this work. It is nevertheless possible that the old drains which have been so often broken into have harbored the organisms of cholera in the form which they assume when the disease is endemic and that having been brought to the surface they have subsequently undergone the change necessary to make them active and virulent.

Whether or not this has been the case the sanitary benefit which will accrue to the city from the installation of a pure water supply and an adequate system for the disposal of sewage will far outweigh any disadvantages which have necessarily followed the construction work which is now fortunately nearing completion.

However, no such justification can be found for the condition into which streets like the Escolta and Rosario have been allowed to fall. Here the numerous holes in the wooden paving have served to retain pools of water when it rained or when the streets were sprinkled and have rendered the placing of these streets in a sanitary condition impossible.

NEEDLESS DELAY IN DRAINING CERTAIN LOW LANDS.

It is furthermore true that numerous low places covered with filthy and stagnant water have recently been drained at small expense. Such work could and should have been done in anticipation of an epidemic rather than when it was upon us, and a very large amount of it still remains to be done.

LACK OF STREETS AND DRAINS IN THICKLY SETTLED SECTIONS.

And if these conditions are objectionable, *what shall we say of the extensive districts where there are no streets, or drains, and where filth must therefore accumulate?*

SHOCKING SANITARY CONDITION OF PORTIONS OF THE SAN LAZARO ESTATE.

Nowhere in the city are sanitary conditions worse than on certain portions of the San Lazaro Estate, and indeed it is difficult to see how conditions could be worse. This matter was first taken up with the Municipal Board in 1904, and since that time the Director of Lands, the Director of Health, and the Secretary of the Interior have repeatedly insisted that the city must act.

At one time there was hope of results, and a small amount of improvement work was actually performed but it was soon discontinued and from that time to the present the city has persisted in its first, and extraordinary, attitude that the estate was private property and that the city could not therefore undertake improvement work on streets running through it, and this in spite of the fact that the Attorney-General decided against the contention of the city and that the Governor-General, in his capacity as Acting Secretary of Finance and Justice, approved this decision.

The attitude of all concerned is clearly set forth in the following correspondence:

To the SECRETARY OF THE MUNICIPAL BOARD, *Manila, P. I.*

(Through the honorable the Secretary of the Interior.)

SIR: From all indications it is apparent that very little money will be available during the present fiscal year for the improvements of the streets through the San Lazaro Estate. However, the conditions on many of these streets are intolerable, and it is requested that, notwithstanding the lack of funds for the necessary improvement of these streets, street sweepings from at least that portion of the city north of the Pasig be devoted to the improvement of the conditions of the streets on the San Lazaro Estate. If this is done,

makeshift roadways for the accommodation of this district will result, which will make great improvement over present conditions. If it is not done, the majority of the residents are without means of reaching their homes during the rainy season except through mud and water. Personal observation leads me to believe that a great quantity of such sweepings are now being dumped in other portions of the city or at the Cemetery del Norte, and as this available dumping ground is almost a mile closer to the city, and the raising of the streets would result in assisting the condition of the living, this request is considered a reasonable one.

Very respectfully,

C. H. SLEEPER, *Director of Lands.*

[First indorsement.]

DEPARTMENT OF THE INTERIOR, MANILA.

Respectfully transmitted to the Secretary of the Municipal Board. The condition of many of the streets running through the San Lazaro Estate is deplorable and it is hoped that something can be done toward improving it in the course of the present year.

DEAN C. WORCESTER, *Secretary of the Interior.*

[Second indorsement.]

MUNICIPAL BOARD OF MANILA,
SECRETARY'S OFFICE, MANILA.

Respectfully returned to the Director of Lands, through the Secretary of the Interior, with the information that since the receipt of the inclosed letter many improvements have been made by the city on streets of the San Lazaro Estate, but there are other places where the necessity for filling in with street sweepings is greater than the streets through the San Lazaro Estate.

By direction of the Board:

JNO. M. TUTHER, *Secretary.*

[Third indorsement.]

DEPARTMENT OF THE INTERIOR,
December 17, 1906.

Respectfully referred to the Director of Lands, inviting attention to the second indorsement.

JAMES F. SMITH, *Acting Secretary of the Interior.*

[Fourth indorsement.]

BUREAU OF LANDS, MANILA.

Respectfully transmitted to the Secretary of the Municipal Board, through the honorable the Secretary of the Interior, whose concurrence in the inclosed recommendations is invited.

C. H. SLEEPER, *Director of Lands.*

DEPARTMENT OF THE INTERIOR,
BUREAU OF LANDS, MANILA.

To the SECRETARY OF THE MUNICIPAL BOARD, *Manila.*

(Through the honorable the Secretary of the Interior.)

SIR: I have the honor to acknowledge receipt of your second indorsement, under date of the 14th instant, upon my letter of July 26, last, concerning the improvement of certain streets in San Lazaro.

As the question submitted for consideration involves the health and convenience of a large number of the citizens of Manila, it is much to be regretted that the honorable Municipal Board has, after lengthy consideration, refused to grant

that which in my opinion is a most reasonable request, and with a view toward securing a reconsideration of the matter, I will invite your attention to the following facts:

That more than one-third—perhaps 40 per cent—of the houses in this district are not subject to taxation, for the reason that their value is less than ₱50.

That a great majority of the houses which are subject to taxation are built upon lands intersected by the established streets of this locality;

That prior to the rearrangement of the houses into systematic block formation, as they are now found in said district—a work planned by this Bureau, and put into execution through its almost unaided efforts—a very small percentage of the houses then standing were subject to taxation, on account of their trifling value;

That this rearrangement gave impetus to the building and improvement of houses in the remodeled district; a spirit of rivalry was aroused among the inhabitants, which impelled each of them to repair and enlarge, or build anew, to the extent of individual ability—a number of them, even in the nipa district, indulging in the luxuries of electric light and water connections—with the result that immense improvements were made in the appearance, convenience, sanitation and healthfulness of the community.

Therefore, judging the future by the past, if the present street system should be extended as recommended, a large tract of land now lying vacant and idle, would become available for building sites; old buildings would be repaired and enlarged and many new ones constructed, which, aside from the betterment of the condition of the residents, could only result in an increased revenue to the city of Manila from at least three sources:

First. Increase in taxable value of the buildings.

Second. Increase in revenues from permits to repair, enlarge, and build.

Third. Increase in revenues from licenses to carry on trades and business interests.

In connection with the above, your attention is invited to the fact that since the first of April of the present year, more than 500 permits have been issued for new buildings, and repairs and additions to old ones, on the San Lazaro Estate, of which number 85 per cent have been for the remodeled district of the estate.

I am informed that during each twenty-four hours more than 100 tons of street sweepings are collected throughout the city (90 per cent of which are suitable for the proposed use) which would represent a heap at the present dumping ground approximately 16 by 30 by 7 feet, or 3,360 cubic feet.

If used for filling in streets, as suggested, a monthly fill might be had of 960 linear feet, 30 feet wide and $3\frac{1}{2}$ feet deep, or 480 linear feet, 60 feet wide and $3\frac{1}{2}$ feet deep. Therefore, in only a few months, the present street system might be extended throughout the entire district without additional cost to the municipality—in fact, a saving could be made, on account of the fact that the distance of the haul would be reduced by about 1 mile.

In addition to the street sweepings, there will be thousands of tons of good filling made available by the displacement of earth for the new sewer system.

It is understood that the street sweepings are now being utilized for the filling in of the del Norte Cemetery, and while the aim of the officials in charge of this work is unquestionably a worthy one, *I am of the opinion that the requirements of the living should take precedence over those of the dead—that a healthy and convenient locality in which citizens may live is more essential than a beautiful place in which they may be buried, and it is probable that so many would not require burial at all, if the miserable conditions surrounding their daily lives were ameliorated.*

Of the many works of improvement in San Lázaro, claimed in your indorsement, I have only to say that careful investigation of the subject confirms my belief that during the past few years, only a minimum of work has been done in this district, and the greater part of that has been of a temporary and makeshift character, and frequently abandoned before completion.

I therefore, have the honor to request that the honorable Municipal Board reconsider its action in the matter to the end that the urgently required improvements may be completed during the coming dry season.

Very respectfully,

C. H. SLEEPER,
Director of Lands.

[Fifth indorsement.]

DEPARTMENT OF FINANCE AND JUSTICE, MANILA.

Respectfully reutrned to the Municipal Board, inviting attention to the fourth indorsement.

JAMES F. SMITH, *Acting Secretary of Finance and Justice.*

[Sixth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,
SECRETARY'S OFFICE.

Respectfully referred to the Director of Lands (through the Secretary of Finance and Justice), inviting his attention to the attached committee report of January 14, which has been adopted as the sense of the Board.

By direction to the Board:

JNO. M. TUTHER, *Secretary.*

[Seventh indorsement.]

DEPARTMENT OF THE INTERIOR, MANILA.

Respectfully returned to the Director of Lands, inviting attention to the sixth indorsement.

JAMES F. SMITH, *Acting Secretary of the Interior.*

[Inclosure to sixth indorsement.—27147—a10—Translation.]

CITY OF MANILA, MUNICIPAL BOARD.

To the MUNICIPAL BOARD:

Gentlemen: The Director of Lands insists in his extensive letter under date of December 19 last, that the city fill the streets in San Lazaro Estate at least with street sweepings collected from the districts adjoining thereto.

The Municipal Board has resolved the first petition negatively and its resolution should be sustained in the present case for the following reasons:

Since by resolution of the Philippine Commission the San Lazaro Estate is exempt from taxes on the land, only the improvements thereon which were assessed at ₱579.404 contribute to the burdens of the city; therefore during the fiscal year 1906 it contributed only with ₱8,691 as taxes on the improvements and a little more than ₱1,000 as miscellaneous receipts, or a total of approximately ₱10,000.

It is not counted herein what was collected as fees for building permits in said estate, because such fees are estimated only to cover the expenses incident to the department of building inspection of private buildings.

The following table shows the expenses incurred by the city on said estate:

Department of engineering and public works.

14 arc lamps	₱2,520
Repairs to Calle San Lazaro, between Calle Quiricada and Calle Sangleyes....	2,215
Repairs to Calle Cervantes, from Calle Bilibid to Calle Quiricada.....	5,373
Total	10,108

Department of sanitation and transportation.

Maintenance of 9 public closets.....	P4,274
Street cleanings	1,548
Garbage collection	1,372
Street sprinkling, excluding the value of water.....	14,024
Total	21,218

The foregoing figures are sufficient to show that the San Lazaro Estate is a very heavy burden borne by other taxpayers, without reckoning the advantages enjoyed by the residents of the aforementioned estate, without paying for them, the safety afforded to their persons by the police and to their property by the fire department.

Neither the San Lazaro Estate contributes to the general expenses for the administration of the city, nor for the maintenance of the department of schools.

The surplus of earth material from street excavations by reason of the construction of the new sewer system becomes the property of the contractors for the work, because it was agreed upon with the contractors that they shall leave the streets in the same condition as they were when commencing the work and without obstructions; therefore the hauling of said material shall be done at their own expense and risk. Otherwise, the city would have to incur an important expenditure in the hauling of many cubic meters of earth and its means of transportation at hand would not be sufficient to do it.

If the city were not bound to accomplish improvements urgently required by other districts and to effect those necessarily required for the sanitation of the Cemetery del Norte, which if not done would be a focus of infection of the alive, the objections of the Director of Lands to the action of the Municipal Board in denying his request would be of much weight.

The share of the Insular Government in the expenses of the city as provided for in the Manila Charter, is at the present time a mere compensation for the reduction of its revenue because of the Internal Revenue Law, of which the present Director of Lands is well convinced, as he so stated himself when he was a member of this Board.

The action taken by the Municipal Board in filling in the north side of Calle Cervantes, is a proof of its good wishes to improve the San Lazaro Estate, and the undersigned believes that nothing can be done further during the current year on behalf of said estate.

Very respectfully,

MIGUEL VELASCO.

The honorable the SECRETARY OF FINANCE AND JUSTICE,

Manila, P. I.

SIR: I have been directed by the Municipal Board to inform you that it has received requests from a number of residents of the San Lázaro Estate to repair and drain the streets within the estate.

The streets there are in a bad condition, needing repairs, and just now especially, improved drainage facilities. The Board has directed me to say, however, that, in view of the fact that no land tax is collected in the Estate, it does not feel justified in expending taxes collected in other parts of the City to repair and drain the streets in the Estate. The Board is of the opinion that the necessary repairs and drainage should be made, and by the Insular Government.

Very respectfully,

JNO. M. TUTHER, *Secretary.*

[First indorsement.]

DEPARTMENT OF FINANCE AND JUSTICE, MANILA.

Respectfully referred to the honorable the Secretary of the Interior.

JAMES F. SMITH,

Acting Secretary of Finance and Justice.

[Second indorsement.]

DEPARTMENT OF THE INTERIOR, MANILA.

Respectfully referred to the Director of Lands.

DEAN C. WORCESTER, *Secretary of the Interior.*

[Third indorsement.]

BUREAU OF LANDS, MANILA.

Respectfully returned to the honorable the Secretary of the Interior, inviting attention to still another petition from residents (who are also taxpayers) of Calles Timbugan and O'Donnell on the San Lazaro Estate.

The ground on which the Municipal Board denies the petition of certain residents of San Lazaro Estate, viz, that it does not feel justified in expending taxes collected in other parts of the city to repair and drain the streets of the Estate, appears absolutely untenable, for the following reasons:

Calles O'Donnell and Timbugan have been public thoroughfares for many years. These streets have been and are in a deplorable condition, which the Municipal Board admits, and it appears to be the duty of the Board to maintain the public streets of the city wherever such streets are located. The fact that the streets are located on the San Lazaro Estate, which pertains to the Insular Government, in no way justifies the city authorities in neglecting said streets. The President of the Commission, when discussing the Charter of Manila, advanced as one of the reasons why the expenditure of Insular funds for the city of Manila was justifiable, the fact that the Insular Government owned large tracts of property in the city which were to be exempt from taxation. If the Municipal Board carries out the policy indicated in the within letter, the Insular Government may reasonably expect that the maintenance and repair of Plaza McKinley, the Bagumbayan and Malecon drives, and other streets and plazas on which are located Insular properties, or other properties exempt from taxation, will be discontinued, and it will be necessary for the Insular Government to organize and maintain a street department, which appears ridiculous. It is therefore recommended that the attention of the Municipal Board be invited to the fact that if the reason advanced in the within letter is the only one why certain streets of the San Lazaro Estate are not put in proper condition, the reason is not sufficient; that it is not the intention of the Insular Government to make appropriations for the maintenance and repair of streets while the city of Manila is receiving the assistance from the Insular Government now provided by law; and, that it appears to be the duty of the Municipal Board to maintain and repair the streets on which the abutting property is exempt from taxation as much as it is on streets where the abutting property contributes taxes.

C. H. SLEEPER, *Director of Lands.*

[Fourth indorsement.]

DEPARTMENT OF THE INTERIOR, MANILA.

Respectfully referred to the Honorable James F. Smith, Governor-General, inviting attention to the third indorsement hereon.

DEAN C. WORCESTER, *Secretary of the Interior.*

[Fifth indorsement.]

DEPARTMENT OF FINANCE AND JUSTICE, MANILA.

Respectfully referred to the Attorney-General requesting an opinion.

JAMES F. SMITH,
Acting Secretary of Finance and Justice.

[Sixth indorsement.]

OFFICE OF THE ATTORNEY-GENERAL, MANILA.

Respectfully returned to the Honorable the Acting Secretary of Finance and Justice, inviting attention to the inclosed opinion of even date.

GREGORIO ARANETA, *Attorney-General.*

[Seventh indorsement.]

DEPARTMENT OF FINANCE AND JUSTICE, MANILA.

Respectfully returned to the Municipal Board, inviting attention to the inclosed opinion of the Attorney-General which is approved by the undersigned.

JAMES F. SMITH;
Acting Secretary of Finance and Justice.

MANILA.

SIR: In response to your indorsement of August 24, 1907, I have the honor to submit the following opinion:

STATEMENT OF FACTS.

The San Lazaro Estate is situated within the limits of the city of Manila. Public streets have been laid out and dedicated to the use of the public and have become public streets belonging to the city of Manila. These streets are in bad condition and need repairs, and especially, improved drainage facilities. The Municipal Board has decided that, in view of the fact that no land tax is collected on the San Lazaro Estate, it does not feel justified in expending taxes collected in other parts of the city to repair and drain the streets on the estate, and expresses the opinion that the necessary repairs should be made, and by the Insular Government.

QUESTION.

Upon whom does the duty of repairing the streets in question devolve?

OPINION.

The streets now existing through the San Lazaro Estate are public streets belonging, as such, to the city of Manila. Section 17 of the Charter of the City of Manila recites, among the general powers of the Municipal Board, the following:

"To lay out, construct, improve, and regulate the use of streets, avenues, alleys, sidewalks, etc."

Section 33 of the Charter of the City of Manila, enumerating the duties of the city engineer, provides that:

"He shall have the care of all public streets, parks, and bridges; shall maintain, clean, sprinkle, and regulate the use of the same for all purposes as provided by ordinance."

It is, undoubtedly, the duty of the city of Manila to maintain and keep in repair any and all public streets within the limits of the city. The fact that a

street is bordered by lands exempt from taxation does not change the status of the street or modify the liability of the city in regard to the repair of the same.

The general law exempts various classes of property from taxation. Religious and eleemosynary institutions, as well as all public buildings and property are, by law, exempt from taxation. Public streets adjoin or border upon many of these pieces of private property so exempt from taxation. Take, for example, the Cathedral; it is bounded on four sides by public streets of the city of Manila. No taxes are collected upon such property. Can it be said that the city of Manila is not under obligations and should not repair the streets adjacent to the Cathedral? There are many instances in the city of Manila where a public street is bounded on both sides by property exempt from taxes. These public streets have been maintained and kept in repair by the city of Manila without question.

The fact that the San Lazaro Estate is exempt from taxation and is administered by the Insular Government in no way affects the character of the public streets that pass through such estate. These streets belong to the city. They were opened and dedicated to the use of the general public of the city of Manila and their use is not confined to the residents and tenants of the San Lazaro Estate. The general public use the streets and have the right, as the citizens of the City of Manila, to demand that the streets be kept in a reasonable state of repair. A public street, even though laid out in a particular locality within the city limits, appertains to and is subject to the use of the general public of the whole of the city of Manila; and it cannot be said that the status or condition of a particular public street is fixed by the condition of the adjacent property.

I am, therefore, of the opinion that it is the duty of the city of Manila to maintain and keep in repair the public streets within the limits of the city of Manila, including those public streets which pass through the San Lazaro Estate, and that no distinction can or should be made because of the condition of adjacent property.

Very respectfully,

GREGORIO ARANETA,
Attorney-General.

To the Honorable the ACTING SECRETARY OF FINANCE AND JUSTICE.

The SECRETARY OF THE MUNICIPAL BOARD, *Manila, P. I.*

(Through the honorable the Secretary of the Interior.)

MANILA, October 12, 1907.

SIR: In a recent conversation with the Director of Health my attention was invited to the almost impossible sanitary condition existing in certain portions of the San Lazaro Estate. The cause of this unsanitary condition appears primarily to be due to the lack of drainage along the streets, and secondly, to the large number of water-holes, not only within the area dedicated to streets, but also within the area within the lots. The Director of Health considered the condition so serious that he urged the immediate necessity of some steps to improve this condition. The status of the San Lazaro Estate has now been determined, and that portion south of the second street north of the hospital (with the exception of the block containing the San Lazaro Cemetery) becomes the property of the Insular Government, while that portion north of the said street becomes the property of the Catholic Church; except that portion of the

Estate dedicated to streets and alleys, which becomes public property under the control of the city of Manila. It is believed that the sanitary condition of that portion of the Estate belonging to the Insular Government can be greatly improved if the Municipal Board will coöperate with this Bureau to that end, without the expenditure of any large sum of money. This Bureau has available for such a purpose a small appropriation, and I therefore propose for the consideration of the Board that a large portion of the street sweepings and garbage now being hauled to the Cemetery del Norte be diverted to that portion of the San Lazaro Estate pertaining to the Insular Government and the city of Manila, with the view of filling all holes and raising that portion of the estate which is low and badly drained (not including the low grass lands, which will be continued to be used as such for some time); the Bureau of Lands to furnish funds for the payment of the necessary labor to back-fill, handle the earth to cover the garbage, etc., dig out ditches along the sides of the streets, and do such other work as may be found necessary; the city to undertake to furnish all the transportation and to supervise the work, whether in the streets or block areas; the department of transportation and sanitation to have control of the laborers and to direct their work, this Bureau being consulted only for the purposes of arranging with tenants for the raising or shifting of buildings, and for the payment of the laborers.

If the Board gives this proposition the consideration it appears to merit, and concludes to coöperate with this Bureau, it is believed that the continual complaints now being received regarding the sanitary condition will be discontinued; and with a small additional amount of work in surfacing the street areas, the condition of the entire estate will be greatly improved.

It is desired that an estimate be prepared showing the approximate expense for the labor for this work which this Bureau may be called upon to bear, and also an approximate estimate of the time necessary, which undoubtedly will extend over a period of many months, but the work should be so far completed by the beginning of the next rainy season as materially to improve the present condition of the estate.

This Bureau has been at a large expense during the past year in rearranging the buildings on the estate so as to leave the streets and alley ways free, and to have the nipa buildings the proper distance apart to protect from conflagrations, and has endeavored in other ways to improve the condition of this estate, but until such a time as the city will coöperate it appears absolutely impossible, without a very large expenditure of money, to meet existing conditions. I therefore urgently request your favorable consideration of this project.

Very respectfully,

CHARLES H. SLEEPER, *Director of Lands.*

[First indorsement.]

DEPARTMENT OF THE INTERIOR, MANILA.

Respectfully forwarded to the Honorable James F. Smith, Governor-General, requesting that early and serious attention be given this matter by the Municipal Board. As the status of the San Lazaro Estate has been finally determined, and as one of the considerations which induces the Insular Government to pay approximately one-third of the expenses of the city of Manila is the fact that it owns large properties within the city limits on which taxes are not paid, it would seem that all excuse for the continuance of the attitude hitherto adopted by the city of Manila in the matter of doing necessary street work and of providing

proper light and water supply for that portion of San Lazaro Estate which is the property of the Insular Government had been done away with.

DEAN C. WORCESTER, *Secretary of the Interior.*

[Second indorsement.]

EXECUTIVE BUREAU,
Manila, October 17, 1907.

Respectfully referred to the Municipal Board with request that a conference be had with the Director of Lands and arrangements made to carry out the proposed improvement of the San Lazaro Estate with the least practicable delay.

JAMES F. SMITH, *Governor-General.*

[Third indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,
SECRETARY'S OFFICE.

Respectfully referred to the city engineer for a statement of costs.

By direction of the Board:

JNO. M. TUTHER, *Secretary.*

[Fourth indorsement.]

OFFICE OF CITY ENGINEER,
Manila, February 6, 1908.

Respectfully returned to the Secretary of the Municipal Board, with a plan showing the location of all the water holes complained of in the letter of the Director of Lands, and the information that a careful calculation of the amount of fill required to bring these low places up to proper grade is approximately 17,166 cubic meters, which is believed will cost not less than ₱2 per cubic meter, or ₱34,332 in all. *The chief of the department of sanitation and transportation informs me that at the present time he can not undertake to carry out the wishes of the Director of Lands. I can not see wherein the city, under these circumstances, can touch the question of the improvement of the estate.* Estimate will shortly be presented by this department, to the Board, for certain work in the street areas in connection with the proposed expenditure of funds raised by the extra peso cedula tax, and in this connection I respectfully invite attention to the ninth indorsement on certain papers pertaining to this matter, dated September 24, 1907.

W. P. WYLIE, *City Engineer.*

[Fifth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,
SECRETARY'S OFFICE.

Respectfully returned to the honorable the Governor-General, inviting attention to the preceding indorsement, which shows the expense of the requested improvements to be so great that the city can not possibly undertake them. *The street areas within this zone will receive attention in the near future.*

By direction of the board:

G. S. LANE, *Acting Secretary.*

[Sixth indorsement.]

EXECUTIVE BUREAU.

Respectfully returned to the Director of Lands, inviting attention to the fifth indorsement.

JAMES F. SMITH, *Governor-General.*

From this correspondence it appears only too clearly that for years the city has persisted in its refusal to perform work absolutely necessary to the placing of large portions of the San Lazaro Estate in a decent sanitary condition. The opinion of the Attorney-General leaves nothing to be said as to the legal obligations resting on the city in this matter but it may well be suggested that in view of the fact that the San Lazaro Estate is administered by the Insular Government for the benefit of the public, and that the income from the Estate goes to the San Lazaro Hospitals in which the lepers, the insane and the cholera victims of the city are supported and cared for at an expense very greatly in excess of the total revenues derived from the estate, there is a moral as well as a legal obligation resting on the city to improve conditions on this property.

We have constantly been assured that the placing of the estate in a decent sanitary condition involving filling which would cost a very large sum. The sanitary engineer informs me that he has gone carefully over the ground, has found that it is from 2 to 7 feet above high tide and that it is entirely feasible to drain it at comparatively small expense by running ditches through it to the neighboring *esteros*.

If there were no other reason for it than the necessity for remedying the indescribable unsanitary conditions prevailing on many parts of this estate this work should have been performed by the city years ago.

In spite of the fact that the Attorney-General rendered an opinion to the effect that the city is under legal obligation properly to maintain the streets through the San Lazaro Estate, which opinion was returned to the Municipal Board approved by the Acting Secretary of Finance and Justice on September 7, 1907; and in spite of the further fact that the Director of Lands offered to share with the city the expense involved, and that the Governor-General requested the Municipal Board to confer with the Director of Lands and arrange to carry out the proposed improvements on the San Lazaro Estate with the least practicable delay, we find the city engineer stating under date of February 6, 1908, *that he can not see wherein the city, under these circumstances, can touch the improvement of the estate and in point of fact the pleasing assurance conveyed at the direction of the Municipal Board to the effect that "the street areas within this zone will receive attention in the near future" has never been realized.*

Meanwhile the streets continue to reek with filth unspeakable; and the people continue to die of preventable diseases.

EXPLANATION OF THE CONTINUANCE OF CHOLERA.

I have thus far endeavored to give a plain statement of the facts as to the past and present cholera situation in Manila and the provinces, and to correct certain misapprehensions which have arisen concerning them.

The conditions set forth leave much to be desired, and we must

manifestly seek their causes if we are substantially and permanently to improve them.

I will now, therefore, give such explanation of the facts as I am able to furnish.

To what have the spread of cholera to the provinces, its continuance here, and the resulting frequent infection of Manila been due?

Beyond the shadow of a doubt they have been due to the lack of a sufficient force of competent men with which to combat the disease. *Who was responsible for this lack?* A conclusive answer to this question may be found in a brief summing up of the record.

The original program for improving the sanitary condition of the Philippine Islands included the establishment of a central Board of Health at Manila to have direct control of sanitary matters in that city and general control over such matters in the provinces; of Provincial Boards of Health, to be subordinate to the Insular Board of Health, and of municipal Boards of Health subordinate to the Provincial Boards of Health. The establishment of the Insular Board of Health was provided for by Act No. 157, passed on July 1, 1901. Act No. 307, "Providing for the establishing of provincial boards of health and fixing their powers and duties," and Act No. 308, "Providing for the establishment of municipal boards of health and fixing their powers and duties," were passed on December 2, 1901.

Act No. 307 provided, among other things, that there should be a provincial board of health in each province of the Philippine Islands, that it should be established at such time as the Board of Health for the Philippine Islands and the Secretary of the Interior thought best and that its president, who would be the chief sanitary officer of the province, should be appointed by the Civil Governor with the consent of the Philippine Commission. The determination of the salaries to be paid presidents of provincial boards of health, within certain limits fixed by law, was left to the Commissioner of Public Health subject to the approval of the Secretary of the Interior.

In carrying out the provisions of Act No. 307 the then well established policy of giving to Filipinos the largest possible amount of intervention in public affairs, was consistently followed. I was asked by the Civil Governor to recommend suitable persons for appointment as presidents of provincial boards of health and my recommendations were in every case acted upon favorably by the Civil Governor and the Philippine Commission. *Of the first twenty-three presidents of provincial boards of health appointed on my recommendation, twenty were Filipinos. In fact, to the best of my recollection, the number of American presidents of such boards of health has never at any one time exceeded three. Not one of the Filipinos appointed was required to pass an examination.*

I made these recommendations with full knowledge that the training of the Filipino physicians appointed had been such as to fit them for the

personal care of the sick rather than for dealing with general problems of public sanitation which can be successfully solved only by specially trained men possessed of a considerable degree of executive ability. It was, however, planned to undertake the systematic instruction of provincial and municipal health officers in their respective districts in connection with periodic inspections of their work. Unfortunately, before the administrative machine thus organized was in even passable running order a tremendous strain was thrown upon it by the cholera epidemic of 1902, which began on March 20, and, as has already been shown, spread until it had invaded thirty-eight provinces.

The conditions which resulted, while not so bad as those which had prevailed during the Spanish régime, were nevertheless deplorable. The hard fact is that provincial and municipal health boards failed most signally to meet the situation and that, except in those cases where medical inspectors could be sent from Manila to take charge, cholera ran its course with little or no hindrance and was terminated in a given locality only by the arising of climatic conditions unfavorable to its continuance, or by the natural decrease in the virulence of the infection and the exhaustion of the supply of susceptible individuals.

I did not feel that under all the circumstances the presidents of provincial and municipal boards of health had enjoyed a fair opportunity to demonstrate their capabilities and still hoped that they might be brought up to a reasonable degree of efficiency. Solely with this end in view it was decided to order all presidents of provincial boards of health on duty at Manila, one or two at a time, in order that they might there receive instruction in the practical application of sanitary science and might then return to their provinces and put in practice there the lessons learned at Manila. This course was followed. In a limited number of instances our hopes were realized and several fairly efficient provincial health officers were developed. In the very large majority of cases I regret to say that increased efficiency was not obtained.

It eventually became painfully evident that the bitter lesson taught the provincial municipalities by the great epidemic of 1902-1904 was being rapidly forgotten. Towns which had temporarily been put in decent sanitary condition relapsed to their original state of uncleanness and only a very limited number of presidents of provincial boards of health struggled successfully against the universal tendency to backslide. A few others did what they could to counteract this tendency but found themselves powerless.

A large majority apparently viewed the situation with complete indifference contenting themselves with making, in a perfunctory way, the inspection trips required by law without any real, determined effort to improve sanitary conditions. Indeed, several presidents reported that they had made their semiannual inspection trips *and at the same time submitted daily time records showing that they had always been present at*

their offices during regular office hours, thus demonstrating that they had performed the remarkable feat of being at the same time in two places widely removed from each other!

It was noted in the case of one president, who was called to Manila for disciplinary action, that his daily reports of the health situation in his province, which was critical, continued to be forwarded to Manila, duly signed, during the entire period of his absence. Investigation showed that he had apparently deemed himself competent to foresee events, as he had sometime before prepared and signed a large advance series of reports and turned them over to a subordinate to be duly forwarded, neglecting to give directions for discontinuing them when he was called away.

Briefly, as a direct result of the appointment as presidents of provincial boards of health of men most of whom were not adequately trained at the outset and were unable or unwilling to profit by the opportunities later given them to secure proper training, the whole system broke down and conditions in the provinces went from bad to worse. It was my opinion, and that of the Director of Health, that such a state of affairs ought not to be tolerated if it was possible to change it. We believed that it *could* be changed by abolishing provincial boards of health and grouping the provinces in health districts each to be in charge of a district health officer *under the immediate control of the Director of Health*. It was our plan to appoint as district health officers those presidents of provincial boards of health who had proved capable and efficient, recognizing meritorious service in each instance by promotion; and by transferring to the remaining positions medical inspectors who had theretofore been *appointed* for the city of Manila but who had in reality been often employed in the provinces where it had been necessary to send them to do work which others were paid to perform.

At my direction the Director of Health prepared a draft of "An Act abolishing provincial boards of health and substituting therefor district health officers, and repealing Act Numbered Three hundred and seven, entitled 'An Act providing for the establishment of provincial boards of health and fixing their powers and duties,' and providing that all the duties heretofore performed by presidents of provincial boards of health and by provincial boards of health shall devolve upon district health officers." This draft was duly forwarded to me, together with the following letter:

DEPARTMENT OF THE INTERIOR,
BOARD OF HEALTH FOR THE PHILIPPINE ISLANDS,
Manila, May 6, 1905.

To the honorable the SECRETARY OF THE INTERIOR, *Baguio*.

SIR: I have the honor to forward herewith a draft of the proposed Act with regard to district health officers.

This bill is the result of the investigation which you requested be made of the present provincial system of boards of health. The unanimous opinion

seems to be that the present plan is ineffective and expensive. The files of the Board of Health contain several hundred letters which give ample evidence of the undesirability of continuing provincial health administration upon the present basis.

Among the advantages to be derived from the passage of the Act are the following:

1. The present plan provides for thirty-one presidents of provincial boards of health, whose salaries amount to \$37,800, U. S. currency. By the proposed scheme the provinces will be divided into twelve districts, and the present medical inspectors of the Board of Health assigned to them. Their salaries would amount to \$24,000, U. S. currency; thus a saving of \$13,800 would be made to the provinces.

2. *In the practical working of the present scheme, it is found to be constantly necessary to supplement the work of the inefficient presidents of provincial boards of health, by assigning experienced officers from the central Bureau to assist them in their work. This is a constant drain on the funds of the Insular Board of Health, and in reality means that two men are being paid for what one man ought to do.*

3. The new plan would provide a more adequate treatment of the sick Americans in the provinces, and would serve as a nucleus for the proposed provincial hospitals.

4. It would facilitate provincial vaccination, and would be much more economical than the present plan of instructing vaccinators in Manila and then sending them to the provinces. Traveling expenses between Manila and the provinces would be saved, and vaccinators could no doubt be hired cheaper when they can be secured nearer their homes.

5. It would provide means for the supervision of veterinary sanitation.

6. It would reduce the amount of official correspondence, and save an immense amount of translating and briefing.

7. The inspections in the provinces would gradually become more uniform. By more central control the experience gained in one province would become available to all.

8. It would facilitate the collection of vital statistics, and a remedy could be applied to correct the present inaccurate returns that are made. Much of the time in the central office is now occupied in correcting these reports.

9. Municipal boards of health would be under better supervision, and the instruction which they would receive from the trained officers would be of real value in improving the sanitation in the provinces.

10. The Insular Board of Health would have a much closer supervision over epidemic diseases. *The cardinal principle in dealing with contagious diseases is, to stamp out the infection of the first cases. It is quite obvious, then, that time is an important factor, and that an officer who would be available at once and actually on the ground, is worth a great many who would of necessity lose much time in starting from Manila.*

11. It would settle the question of authority, and many of the present embarrassments caused to the central government would be avoided. The trouble caused by the cemeteries in the provinces is an example.

12. *It would establish more confidence. Business enterprises would be more secure, in that they would not be at the mercy of factions.*

In conclusion, attention is respectfully invited to the fact that the passage of the "District Health Officers Act" would result in a net saving of \$13,000, U. S. currency, to the provinces, and \$24,000, U. S. currency, to the Insular

Government, and at the same time substitute a system that has merit for one that is universally admitted to be not only useless, but, in addition, a constant cause of friction and a source of much dissatisfaction.

Very respectfully,

VICTOR G. HEISER,
P. A. Surg., U. S. P. H. & M. H. Service,
Commissioner of Public Health.

On August 1, 1905, it was forwarded by me with the following indorsement:

[First indorsement.]

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
DEPARTMENT OF THE INTERIOR, MANILA.

Respectfully forwarded to the recorder for transmission of these papers to the Commission, inviting attention to the accompanying communication from Dr. Heiser, and recommending the passage of the within Act.

DEAN C. WORCESTER, *Secretary of the Interior.*

The act having passed a first reading, it was deemed best on account of its importance, to give opportunity for its public discussion, and in view of the fact that many of the provinces interested could not send representatives to be present when it was considered in public session, a copy of it was forwarded to each provincial board with the request that the board forward its opinion in writing. The large majority of the boards favored the bill. It is, however, only fair to say that there was nothing in the bill itself to show that the dropping from office of inefficient presidents of provincial boards of health, and their substitution as district health officers by efficient medical inspectors sent from Manila, was contemplated. Had this been made plain, as it should have been, some of the replies received would doubtless have been of a different character.

When the bill came up before the Philippine Commission for a third reading and passage I again called attention to the fact that if it passed, proper provision for carrying out the policy outlined would be inserted in the next appropriation bill. It was thereupon stated that Dr. Heiser and I were trying to make places in the provinces for a large number of American medical inspectors whose services were not needed either there or in Manila, and that the appropriation for the Bureau of Health was twice as large as was necessary. After protracted discussion the bill was laid on the table where it remained until the Commission adjourned to Baguio.

It was evident that the bill as it then stood could not pass, and I was directed by Governor-General Ide to meet with other members of the Commission and *draft a bill which could pass.* I endeavored to do so.

The first section of the bill as originally drafted read as follows:

SECTION 1. Subject to the approval of the Secretary of the Interior the Bureau of Health for the Philippine Islands shall divide the Archipelago into such

number of health districts not exceeding eighteen as he may deem advisable and the Director of Health may assign thereto such number of District Health Officers, Sanitary Inspectors, and other agents and employees as may be necessary.

The corresponding portion of the bill as finally passed read as follows:

SEC. 2. Each province may have a district health officer appointed by the Governor-General, with the advice and consent of the Philippine Commission. Subject to the approval of the Philippine Commission, the Director of Health may increase the number of district health officers assigned to a province or may unite two or more provinces and assign to them a district health officer. He may also assign to each district such other duly authorized sanitary officers or employees as he may deem necessary.

Any regularly appointed person holding the office of president of a provincial board of health at the time of the passage of this Act shall be eligible for appointment without examination to the position of district health officer during a period of two years from the date on which this Act becomes effective.

Under the act as originally drafted, supplemented by the contemplated provisions in the appropriation bill, district health officers would have been appointed by the Director of Health subject to the approval of the Secretary of the Interior and would have been assigned to duty wherever circumstances required their presence. This would have given a mobile force composed for the most part of men of tried and proved efficiency. Ordinary conditions in the provinces or in Manila could have been met without moving men from the one region to the other and in special emergencies a few men could have been spared for transfer from Manila to the provinces and vice versa without creating a dangerous situation. For purposes of discipline this force of officers would have been under the immediate control of the Director of Health and the Secretary of the Interior, and had it proved inadequate properly to safeguard the health of the people of the Philippine Islands responsibility for results would necessarily have rested squarely upon these two officials.

The act as finally passed left the Director of Health and the Secretary of the Interior without authority to establish health districts or to appoint or to remove district health officers. At the time it was passed both the Secretary of the Interior and the Director of Health believed that it at least authorized the latter official to assign properly appointed district health officers to duty wherever their services might be needed, but in actual practice it was interpreted to mean that even in meeting great emergencies the Director of Health might not so much as temporarily transfer a district health officer from one district to another without the consent of the Governor-General and of the Philippine Commission first had.

The situation might still have been redeemed, at least to a considerable extent, had there been inserted in the appropriation bill proper provisions as to salaries so as to allow the appointment as district health officers of the men whom it was originally intended to employ in this capacity, but it was understood at the time Act No. 1487 was passed that this would

not be done, but that the new positions would be filled by the more competent ex-presidents of provincial boards of health.

In spite of this understanding Dr. Heiser was so thoroughly convinced of the absolute necessity of the change, if the public health was to be properly safeguarded, that he included in his estimate of appropriation required for the fiscal year ending June 30, 1907, the following provision:

DISTRICT HEALTH OFFICERS.

Salaries and wages.

11 district health officers, at ₱4,000 per annum	₱44,000
1 district health officer, at ₱4,000 per annum (increase submitted)	4,000
(In lieu of 1 medical inspector, at ₱3,600 per annum.)	
3 district health officers, at ₱4,000 per annum (submitted)	12,000
Total, salaries and wages	60,000

Contingent expenses.

Traveling expenses of district health officers	7,500
Total, district health officers	67,500

NOTE.—It will be noted that the above estimates contemplate the inauguration of the district health plan as originally proposed by this office.

In the foregoing estimate, in addition to the medical officers for the hospitals of the Bureau and for the prison sanitation division, there are requested five medical inspectors, with salaries aggregating ₱23,400, for city and central office work. This amount represents the total charge against the Insular funds on account of medical inspection, as against 17 medical inspectors allowed by Act 1416 with salaries aggregating ₱71,000. The above amounts requested for district health officers will be refunded to the Insular Treasury by the various provinces, as provided in Act 1487.

This would have provided fairly adequate compensation for fifteen district health officers and, supplemented by the other provisions of the estimate, would also have provided salaries for the medical officers of the hospitals conducted by the Bureau and for five medical inspectors for work in the city of Manila.

When interrogated as to his reason for inserting such a provision in his appropriation estimate after a wholly different policy had been finally determined upon, Dr. Heiser replied that he was so firmly convinced of the absolute necessity of the change that he felt it his duty once more to urge it and that he had inserted the provision in order that if it were stricken out the responsibility for such action might be clearly defined. It was stricken out by the Commission.

The appropriation bill as finally passed contained a further provision which embodied unsuspected possibilities of mischief. It had been originally planned to change the designations of the more responsible medical officers employed by the Bureau of Health, making all physicians in charge of hospitals and also all medical inspectors district health officers, the object being twofold, namely, to give to the force the greatest possible

mobility so that the men might be used whenever and wherever needed and to open to Filipino physicians positions for which it was probable they could not qualify if compelled to pass civil-service examinations, but for which it was hoped they might, in actual practice, demonstrate their fitness, Act No. 1487 having contained a provision to the effect that any person who had held the position of president of a provincial board of health would be eligible to appointment as a *district health officer* at any time within a period of two years after the passage of the Act.

The undersigned did not desire to have this privilege withdrawn from worthy ex-presidents of provincial boards of health and believing, as he did, that under the provisions of Act No. 1487 the assignment to duty of all district health officers was completely within the control of the Director of Health, raised no objection to the provision. *Under the accepted interpretation afterward put upon the provisions of this Act the Director of Health was deprived of all control of the assignment to duty of even those officers in charge of hospitals and of the men really employed as medical inspectors in the city of Manila. The condition thus created was absolutely without precedent in the administration of the Bureaus of this Government. The Director of Health, who is constantly called upon to take prompt and effective action in combating the most dangerous contagious diseases, was left without power to appoint or to remove a single one of the numerous medical officers in the employ of his Bureau, or to order any such officer to duty outside of a district fixed, not by him, but by the Philippine Commission.*

Nor did the matter end here. By a subsequent resolution of the Commission, the list of eligibles from which it was possible to draw in appointing district health officers was in effect limited to the five ex-presidents of provincial boards of health remaining after the more competent of these men had been given employment.

Of these eligibles one was suffering from an aortic aneurism which had become so serious that he was unable to lie down; a second was afflicted with dyspnœa; although a short man, he weighed more than 200 pounds, and the climbing of an ordinary flight of stairs often made it impossible for him to speak for several moments; a third was at that time a provincial governor who had requested, and had been refused by the Governor-General, the privilege of acting as district health officer without pay, while the remaining two were believed to be deficient in technical training.

One of the latter, Dr. Victorino Crisologo, was subsequently appointed district health officer for Lepanto-Bontoc and is now suspended pending his reply to the gravest charges which have ever been brought against a district health officer in these Islands and which if sustained should lead not only to his summary dismissal from the service but to a withdrawal of his right to practice the medical profession.

Under the policy outlined by a resolution of the Commission of December 20, 1906, the choice of the appointing power was clearly limited

to these five men in filling all positions of district health officer, which as the law then stood, included the officer in charge of the Civil Hospital, the officer in charge of the San Lazaro Hospital, the officer in charge of the Baguio Hospital, the officer in charge of the Leper colony, and the officers in charge of the sanitation of the city of Manila as well as those in charge of the several provincial health districts. This, too, in spite of the fact that not one of them had passed a civil service examination.

THE BURDETTE CASE.

On August 17, 1906, the Director of Health had made a *request* on the Bureau of Civil Service for the appointment *in the United States* of a district health officer at ₱3,600 per annum. This officer was desired to perform the work of a medical inspector of Manila, which of course included occasional trips to the provinces.

Upon the passage of Act No. 1487 I had assured Dr. Heiser that I would support him in an effort to keep his Manila force intact and efficient, so that we might have something to fall back on in case of an epidemic, and the one American on the eligible list having been objected to by Dr. Heiser and his objection having been sustained by the Director of Civil Service the alternatives which were presented were to request the appointment of one of the five men above mentioned, or to ask for a man from the United States.

Dr. Heiser chose the latter alternative and I approved his request, acting with a full knowledge of all the facts. Governor Ide, in whom was vested the power to make the appointment, subject to approval by the Commission, forwarded the following cablegram:

[Cablegram.]

August 20, 1906.

SECWAR, Washington:

Request William S. Washburn to select district health officer, \$1,800 per annum.
IDE.

In accordance with this request Dr. Benjamin L. Burdette was sent out, and upon his arrival, his official appointment was asked for, as is customary.

The Commission thereupon, on December 6, 1906, passed the following resolution:

Whereas there has been presented to the Commission for confirmation in accordance with law the nomination of Dr. Benjamin L. Burdette to be district health officer at a salary of ₱3,600 per annum; and

Whereas it appears that on August 20, 1906, Governor-General Ide, without reference of the matter to the Commission, telegraphed to Washington requesting that Dr. W. S. Washburn, Director of the Philippine Bureau of Civil Service, then in Washington, select a qualified person to fill the position of district health officer at the salary mentioned, in accordance with which Dr. Washburn selected Dr. Burdette, who arrived in Manila on December 3, 1906; and

Whereas, in view of the fact that the Philippine Commission finds that there are available, and were available at the time the telegram was sent to the

United States for a district health officer, physicians who are eligible for appointment under the Civil Service Act and Rules and who it is believed are perfectly capable of filling the position of district health officer, it seems to the Commission that it would be not only unjust to these men, but contrary to the policy of the Government to send to the United States for a person to fill such positions; and

Whereas, for the reasons set forth, the Commission feels that it can not confirm the appointment of Dr. Burdette to the position in question, but appreciating the fact that he came to these Islands in good faith expecting appointment on his arrival, it believes that it is no more than just that the Government should protect him from actual financial loss in the premises: Now, therefore, be it

Resolved, That Dr. Benjamin L. Burdette be informed through the Director of Health that for the reasons above set forth the Commission can not see its way clear to confirm his nomination as district health officer and that if, under the circumstances, he desires to return to his home, the Government stands ready to pay him a sum equal to compensation at the rate of ₱3,600 per annum from the date he left his home in the United States to come directly to the Philippine Islands to fill the position of district health officer to the date of his arrival at his home in the United States on the return voyage, provided he takes the first available direct transportation from Manila to the United States and upon his arrival there the first available direct rail transportation to his home, and also stands ready to pay his actual and necessary traveling expenses from his home in Manila and return: *Provided*, That return traveling expenses and compensation for the period from the date of his leaving Manila to the date of his arrival at home shall not be paid until such arrival and then only upon such properly executed and signed vouchers as may be required by the Insular Auditor; and

Resolved further, That should Dr. Burdette accept this proposition the Insular Auditor is hereby directed to make proper settlement with him from the general purpose appropriation in accordance with this resolution.

Later the matter was reconsidered and on December 20, 1906, the following resolution was adopted:

Whereas there has been submitted to the Philippine Commission the nomination of Dr. Benjamin L. Burdette for appointment as district health officer in the Bureau of Health at a salary of ₱3,600 per annum; and

Whereas the Commission, by its resolution of December 6, 1906, refused to confirm said nomination on the grounds that the person involved had been brought from the United States without proper authority, and while there were eligibles for said position on the eligible list of the Bureau of Civil Service; and

Whereas it is the desire of the Acting Secretary of the Interior that the Commission reconsider its resolution of December 6, 1906, rejecting the nomination of Dr. Burdette as above stated: Now, therefore, be it

Resolved, That it view of the expenditures already made and the obligations already incurred by bringing Dr. Benjamin L. Burdette to these Islands from the United States, and in view of the further fact that after exhausting the present list of eligibles it will still be necessary, in the opinion of the Director of Health and the Acting Secretary of the Interior, to fill two additional vacancies now existing in the corps of district health officers, the said resolution of the Commission of December 6, 1906, be, and the same is hereby, revoked, and the

nomination of Dr. Benjamin L. Burdette to the position of district health officer be, and the same is hereby, confirmed; and be it

Resolved further, That the Director of Health be informed that the nomination of Dr. Burdette is confirmed solely on account of the expenditures already made and the obligations already incurred in bringing Dr. Burdette to these Islands under the circumstances above set forth, and for no other reason, and that the action and policy of the Director of Health in bringing from the United States a person for appointment as district health officer when one or more persons eligible for said position are on the eligible list of the Civil Service Bureau is hereby disapproved.

Referring to that portion of the resolution of December 6, 1906, which reads:

Whereas, it appears that on August 20, 1906, Governor-General Ide, without reference of the matter to the Commission, telegraphed to Washington requesting that Dr. W. S. Washburn, Director of the Philippine Bureau of Civil Service, then in Washington, select a qualified person to fill the position of district health officer at the salary mentioned, in accordance with which Dr. Washburn selected Dr. Burdette, who arrived in Manila on December 3, 1906.

I find from an examination of the records that prior to this time no less than forty-seven officers whose appointment was necessarily made by the Governor-General with the approval of the Commission, had been brought from the United States without reference of the matter to the Commission, and that three such officers, including the present Acting Director of Health, and a district health officer, have since been so brought. *In no other case has such action been criticised or objected to by the Commission.*

Referring to that part of the preamble of this same resolution which reads:

Whereas, in view of the fact that the Philippine Commission finds that there are available, and were available at the time the telegram was sent to the United States for a district health officer, physicians who are eligible for appointment under the Civil Service Act and Rules and who it is believed are perfectly capable of filling the position of district health officer, it seems to the Commission that it would be not only unjust to these men, but contrary to the policy of the Government to send to the United States for a person to fill such position.

I have requested from the Director of Civil Service an expression of opinion as to whether, in bringing Dr. Burdette to the Philippines, there was any violation of the Civil Service Law or Rules or of any precedent thereunder, and have received the following reply:

[First indorsement.]

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,

BUREAU OF CIVIL SERVICE,

Manila, October 10, 1908.

Respectfully returned to the honorable the Secretary of the Interior.

On August 17, 1906, the Director of Health made request on the Bureau of Civil Service for the appointment in the United States or one district health

officer at \$1,800 per annum. There being but one name on the health officer list of eligibles, to whose appointment objection had been made and sustained in accordance with civil-service rules, the request of the Director of Health was forwarded through the Secretary of the Interior to the Executive Secretary for transmission by cablegram. Cablegram was sent by Governor-General Ide on August 20, 1906. Dr. Benjamin L. Burdette was selected for appointment as health officer from the United States Civil Service Commission's register of eligibles, and on October 6, 1906, he signed the usual contract of appointment to the position of district health officer and was provisionally appointed by the Chief of the Bureau of Insular Affairs in accordance with specific authority contained in cablegram of the Governor-General of August 20, subject to all the provisions, requirements, and penalties contained in Act No. 1040. Dr. Burdette arrived in the Islands December 3 and reported to the Bureau of Health for duty December 4, 1906, and the Governor-General was so advised on that date. On December 6, 1906, the Philippine Commission passed a resolution declining to confirm his appointment. (See Executive Bureau file 92881.)

Referring to this resolution, it has not been the uniform practice in making appointments in the United States which require confirmation for the Philippine Commission to secure such confirmation before the Governor-General cables the Bureau of Insular Affairs to make selection and appointment. For example, on October 29, 1906, Governor-General Smith without submitting the matter to the Commission, on nomination of the Director of Health and concurrence of the Bureau of Civil Service, requested the appointment by cablegram of Doctor Zach M. Laughlin as health officer at a salary of \$1,800 per annum, subject to all the provisions, requirements and penalties of Act No. 1040. The questioning of the regularity of Dr. Burdette's appointment in the second paragraph of the resolution above mentioned is the only instance where the propriety of such action by the Governor-General has ever been questioned, so far as I am aware.

Referring to the third paragraph of this resolution, the Bureau of Civil Service having accepted as satisfactory the reasons given by the Director of Health for not appointing Dr. William S. Card, the only person whose name was on the physician register of eligibles in August, 1906, there was nothing in the Civil Service Act and Rules and no precedent to prohibit the appointment of an eligible in the United States. Paragraph 2, section 2 of Act No. 1487, provides that "Any regularly appointed person holding the office of president of a provincial board of health at the time of the passage of this act shall be eligible to appointment without examination to the position of district health officer during the period of two years from the date on which this act becomes effective." In this law no reference is made to the Civil Service Act; this paragraph does not, in terms at least, amend the Civil Service Act; no reference is made to civil service examination. The word "examination" therein might be construed to mean an examination held by the Director of Health. But if this provision of law was amendatory of the Civil Service Act, the mere fact of eligibility for reinstatement does not require the appointing officer to make appointment by reinstatement in preference to appointment from the register of eligibles. Under the law it appears to be entirely discretionary with the appointing officer as to which method of filling a position shall be adopted by him. If the provision of section 2 of Act No. 1487 had been mandatory it would have required the appointment of incompetent persons to the position of district health officer. Had the Director of Health considered any of those whose appointment was allowable, but not mandatory, by law to be competent to intrust with the very serious and important work of sanitation in large districts, recommendation would have been made for their appointment instead of bringing a health officer from the United States. In the exercise of the power conferred on nominating and

appointing officers they appear to have been governed wholly by the interests of the service in bringing health officers from the United States.

This provision of law (par. 2, sec. 2 of Act No. 1487) was probably repealed by Act No. 1698, effective August 31, 1907, but if not repealed it expired by limitation on July 1, 1908. Appropriation Act No. 1679, effective July 1, 1907, appears to have re-created the position of medical inspector; since that time the appointments as medical inspector of Doctors Henry O. Jones and Alexander S. Rochester have been made by the Director of Health and approved by the Secretary of the Interior in accord with the Civil Service Act and Rules, no confirmation by the Commission being required.

On December 19, 1906, the Commission reconsidered its resolution of December 6 and confirmed the appointment of Dr. Burdette by another resolution. *The action of the Director of Health in requesting the appointment in the United States of Doctor Burdette and others was perfectly regular and in accord with the Civil Service Act and Rules and with precedents, and in view of the fact that it was not incumbent upon the Director of Health to submit the proposed appointments to the Commission for action, it would appear that his action relating thereto was in no way blamable.*

The fact should not be overlooked that Doctor Burdette was entitled to preference in appointment under the provisions of section 19 of the Civil Service Act, he having been honorably discharged from the military service of the United States.

Ten American medical men having a regular status in the Bureau of Health have resigned since July 1, 1906, while only four, as stated above, have been appointed in the United States since that date.

W. S. WASHBURN,
Director of Civil Service.

Referring to that portion of the resolution of December 20, 1906, which reads as follows:

Resolved further, That the Director of Health be informed that the nomination of Dr. Burdette is confirmed solely on account of the expenditures already made and the obligations already incurred in bringing Dr. Burdette to these Islands under the circumstances above set forth, and for no other reason, and that the action and policy of the Director of Health in bringing from the United States a person for appointment as district health officer when one or more persons eligible for said position are on the eligible list of the Civil Service Bureau is hereby disapproved.

This is in effect a vote of censure upon the Director of Health for an act which was performed, not by him, but by the Governor-General of the Philippine Islands.

Dr. Heiser was, under the law, absolutely without power to appoint a district health officer much less could he bring one from the United States. The action censured was taken, not by him, but by the Governor-General and it was taken with the approval of the Acting Director of Civil Service and that of the Secretary of the Interior. If any one was to be censured it should, therefore, have been the Governor-General, the Secretary of the Interior, and the Acting Director of Civil Service rather than the Director of Health who acted in this matter with the full approval of all his superiors.

The Director of Civil Service in the communication above quoted

has clearly set forth the law, the rules and the precedents on this subject. Our civil-service system is supposed to be a *merit* system. I understand it to be the duty of the Civil Service Board to keep available the largest possible list of highly qualified candidates for positions in which vacancies exist or are likely to occur *and it is required that candidates to be certified be taken from the top of this list, not from the bottom.*

Section 1 of rule 5 of the Civil Service Rules reads as follows:

1. *The appointing officer shall make requisition upon Form No. 9 for the names of eligibles for the position vacant, specifying the duties of the position, and the Board shall certify to said officer from the proper register the three names at the head thereof which have not been three times certified to the office or branch of the service in which the vacancy exists.*

The resolution of December 20, 1906, in effect served notice on the appointing officer that if he did not take his nominees from the eligibles who had been at the very *foot* of a list until the list was completely exhausted, his appointments would be disapproved.

The action of the Commission, not being in accordance with the Civil Service Law or Rules, was binding on the appointing officer only through the fact that through the arbitrary use of the power conferred upon it by Act No. 1487, it could approve or disapprove the appointment of any district health officer.

It would clearly have been useless to attempt to strengthen the force of district health officers of these Islands by bringing appointees from the United States after the passage of this resolution and all effort to do so was necessarily abandoned for the time. I have not hesitated thus frankly to discuss the action of the Commission in this matter for the reason that its resolution of December 20, 1906, was given to the public press. Had I been in the Philippine Islands at this time I should have utilized the same medium for the expression of my views on the subject. I am of the opinion that that portion of the Commission resolution of December 20, 1906, which censures Dr. Heiser for his action in the Burdette case was unjust and should be repealed; and that this resolution, with that of December 6, 1906, have combined to discourage and drive out of the service efficient American medical officers and to prevent the appointment of efficient men in the their places.

At all events there has been a steady decrease in the number of American physicians in the service at Manila from 1902 until the present time as the following table will show:

Year.	Physicians.		Total.
	Amer- ican.	Fili- pino.	
1902	73	9	82
1905-6	19	5	24
1908	5	2	7

The force of "cholera experts" at Manila (see telegram on p. 115) now consists of five Americans and two Filipinos. The following is a sample of the urgent calls for assistance that have been received from the provinces:

SURIGAO, October 21, 1908.

SHEARER, Manila:

Please advise if launch *Bongao* has orders to proceed Hinatuan. Letter from American teacher reports situation grave municipal officials panic stricken hide in houses refuse to issue orders or anything police abandon their posts people run away neglecting their sick and refuse to bury the dead. Teacher states has taken charge and with aid of club manages to bury dead five or six daily can do nothing for sick no medicines no one with knowledge cholera this being first appearance in Hinatuan. If can secure *Bongao* governor doctor and Constabulary guard will proceed Hinatuan with supplies and medicine other communication four to ten days baroto travel dangerous this season disease also spreading adjacent islands answer.

GRAVES.

The reply which we were obliged to send to this communication was:

MANILA, October 21, 1908.

GRAVES, Surigao:

Bongao ordered Hinatuan via Surigao. Doctor Tacloban busy cholera Leyte.

CARPENTER.

Hinatuan is in a district which has a Filipino district health officer of its own and the request in this instance was that the American district health officer for Samar and Leyte should proceed to this place. The extent to which our "cholera experts" of Manila have been sent into the provinces since July, 1906, is shown by the table on page 109. On account of the very limited number of these men now in the service it is nevertheless usually necessary, as in the present instance, to turn a deaf ear to requests like this except when they come from provinces in the immediate vicinity of Manila, and even then the sending out of any one of the seven men on whom we are forced to depend in safeguarding the health of that city is often attended with serious risk.

ATTEMPTS TO SECURE REMEDIAL LEGISLATION.

The condition above outlined was that which confronted me upon return from leave of absence in the United States. Believing it to be intolerable, and fraught with the gravest danger I attempted to remedy it. The first step in this direction was to recommend to the Commission the reestablishment of the office of medical inspector for the employees in charge of hospitals or of the sanitation of the city of Manila. This recommendation was approved and was made effective in the appropriation bill for the fiscal year ending June 30, 1908. These positions were thus brought again under the control of the Director of Health and the Secretary of the Interior and section 1 of Rule 5, of the Civil Service Rules, which had in effect been annulled, so far as they were concerned, by

the resolution of the Commission of December 20, 1906, was again made applicable to them. However, the net result has been that of the very limited number of American officers remaining in the service on July 1, 1906, ten have since resigned. Four American medical officers have been appointed to positions thus vacated giving a net reduction of six.

The next step was to secure an amendment to Act No. 1487, authorizing the *temporary* transfer of district health officers upon approval of the Governor-General, and there the matter now rests.

I have no serious objection to the leaving of the establishing of health districts where it now is, in the hands of the Commission, but do object decidedly to that provision of the existing law which makes it necessary to secure the approval of the Governor-General before a district health officer may be transferred from one district to another even in meeting a great emergency. In view of the fact that up to the present time there has never been a single instance in which the Governor-General has failed to act favorably upon the recommendation of the Director of Health and the Secretary of the Interior relative to the temporary transfer of a district health officer, it would seem that this restriction is a needless one and only results in a waste of time.

The suggestion is made that the present system for the appointment and removal of district health officers, who are immediate subordinates of the Director of Health, but who may be appointed and removed only by the Governor-General with the approval of the Commission, is not conducive to good discipline for the reason that the officer directly responsible for our health policy and its results is without power to remove these subordinates and as this fact is well known to them less attention is paid to his instructions in many instances than would otherwise be accorded to them.

INSUFFICIENCY OF THE PRESENT FORCE.

Of the Bureau of Health force regularly employed by the Insular Government for work in the city of Manila, Dr. Victor G. Heiser, Director of the Bureau, and Dr. A. P. Goff, medical inspector, are absent from the Islands and the force actually available for duty is as follows:

Dr. Allan McLaughlin, Acting Director of Health;

Dr. H. E. Stafford, in charge of the Civil Hospital;

Dr. R. E. L. Newberne, in charge of the insane and lepers at San Lazaro Hospital;

Dr. W. A. Christensen, in charge of the sanitation of Bilibid Prison; and Doctors A. S. Rochester, B. J. Burdette, H. O. Jones, Paul Clements, Zach Laughlin, Luis Abella, and S. V. del Rosario, medical inspectors for

Manila. Leaving out of account the four men whose duties confine them strictly to institutions, there are supposedly available for the general work of sanitation and the combating of epidemic disease in Manila seven men of whom five are Americans and two are Filipinos.

Manila is a city of some two hundred and thirty thousand inhabitants and in order properly to deal with such conditions as existed during the last two weeks of September there should be available a force of at least fourteen medical inspectors, yet the fact is that not even the very limited force above enumerated is ever available for any length of time for the reason that it has proved necessary constantly to strip Manila of its few effective men in order that they might perform in the provinces work which others are employed to do.

The following table shows the occasions on which Medical Inspectors and Sanitary Inspectors regularly serving in Manila have been ordered to the provinces since July 1, 1906:

Name of health officer.	Districts sent to.	Dates.
Dr. Luis Abella, M. I.	Rizal, Cavite, and Bataan	July 10, Oct. 3, 1906.
	Masbate, Romblon, and Mindoro	Aug. 14, Oct. 4, 1906.
	La Laguna	June 3, 1907; Jan., 1908.
	La Union, Zambales	Jan., 1908.
	Rizal, Cavite, and Bataan	Feb. 24, 25, 1908.
Dr. W. K. Beatty, M. I.	Pangasinan	June 9, Aug. 20, 1908.
	Nueva Ecija	June 11, Aug. 20, 1908.
Dr. B. L. Burdette, M. I.	La Laguna	July 10-25, 1906.
	Pangasinan	June 10-19, 1908.
Dr. Paul Clements, M. I.	Cavite, Rizal, and Bataan	July 1, Aug. 21, 1906.
	Bulacan	July 8, 9, 15, 29, 1906.
	Capiz	Dec., 1906.
	Iloilo	Sept. 12, 1907; Feb. 7, 1908.
	Rizal, Cavite, and Bataan	Jan. 4, 5, Mar. 27, 28, 1908.
	La Union, Zambales	July 9-July 31, 1908.
	Pangasinan	June 9, 1908.
Dr. H. W. Eliot, M. I.	Mountain Province	Oct. 8, 1908.
	Ilocos Norte, Ilocos Sur	July 25-Sept. 26, 1906.
Dr. H. O. Jones, M. I.	Pangasinan	June 11-July 9, 1908.
	La Union, Zambales	July 9-Aug. 14, 1908.
Dr. Z. Laughlin, M. I.	Iloilo	Aug. 13, 1908.
Dr. S. del Rosario, M. I.	Pampanga	Oct. 27-Dec. 24, 1906.
	Bulacan	July 2-13, 1906.
Dr. M. C. Terry, M. I.	Pampanga	July 2-25, 1906.
	Nueva Ecija	July 2, 1906.
	Tarlac	July 2, 1906.
	Rizal, Cavite, and Bataan	July 26, 1906.
	Batangas, Tayabas	July 27-Oct. 1, 1906.
	Samar, Leyte	Aug. 17-Sept. 28, 1907.
	Pampanga	Nov. 15-Dec. 23, 1907.
C. Brantigan, S. I.	Bulacan	Nov. 15, 1907.
	Bulacan	Feb. 3, 1908.
	Pangasinan	Feb. 6-July 9, 1908.
	La Union, Zambales	Aug. 15, 1908.
	Ilocos Sur, Ilocos Norte	Aug. 15, 1908.
	Occidental Negros	Nov., 1907.
	Rizal, Cavite, and Bataan	Jan. 5-31, 1908.
O. R. Dexter, S. I.	Masbate, Romblon, and Mindoro	Feb. 6-Mar. 31, 1908.
	Rizal, Cavite, and Bataan	Mar. 8, 1908.
W. G. Hogle, S. I.	Occidental Negros	May 1, 1908.
	La Union, Zambales	Sept. 10, 1908.
Chas. T. Palmer, S. I.	Batangas, Tayabas	July 21-Sept. 18, 1906.
	Pangasinan	July, 1908.
Harry Percy, S. I.	Mountain Province	Oct. 8, 1908.
	Batangas, Tayabas	Sept. 18-20, 1907.
	Benguet	July 14-Aug. 20, 1908.

The force now available for work in the provinces is as follows:
 Dr. J. W. Smith, in charge of the Hospital at Baguio, Benguet;
 Dr. J. H. Biggar, in charge of the Culion Leper Colony;
 Dr. B. L. Bunnell, assistant at Culion Leper Colony;
 and the following district health officers:

Dr. Arlington Pond;	Dr. Telesforo Ejercito;
Dr. W. K. Beatty;	Dr. Mariano Felizardo;
Dr. G. J. Cullen;	Dr. V. de Jesus;
Dr. Florentino Ampil;	Dr. José Mascuñana;
Dr. Pablo Araneta;	Dr. Candido Mora;
Dr. P. Quisumbing;	Dr. Julio Ruiz;
Dr. D. Montinola;	Dr. A. Fernando;
Dr. Felix Bautista;	Dr. B. Torribio;
Dr. Luis Caballero;	Dr. F. Xavier;
Dr. Andres Catanjal;	Dr. R. Villafranca.

Omitting from this list the three men engaged in hospital work there remains in the provinces a regular force of three American and seventeen Filipino district health officers whose duty it is to bring about and perpetuate sanitary conditions among some seven and three-quarters millions of Christian and non-Christian inhabitants.

PRESENT AUTHORIZED FORCE.

Dr. Heiser inserted in his estimate of the appropriation needed for the Bureau of Health a request for the present fiscal year for thirteen medical inspectors at ₱4,000 per year each. In the compromise bill finally passed by the Assembly and Commission these positions were included and when they have been filled there will be a fairly adequate force available for safeguarding the health of Manila in emergencies, while under ordinary circumstances several medical inspectors can be assigned to perform special work in the provinces or to assume the regular duties of district health officers.

This fact is of especial importance as the civil service list of Filipino eligibles for appointment as district health officers is entirely exhausted and with two or three exceptions the salaries now authorized for district health officers are not such as to make it possible to secure eligibles from the United States.

SALARIES PAID TO AMERICANS AND TO FILIPINOS.

Although the contention has sometimes been advanced that the salaries paid to American officers of the Bureau of Health were excessive, while those paid to Filipinos were inadequate, attention is invited to the fact that from December 2, 1901, when the Act providing for the establishing of provincial boards of health was passed until the present date, thirty-

five American health officers have voluntarily resigned. There is on record but one case of a Filipino president of a provincial board of health, district health officer, or medical inspector, who has voluntarily resigned his position and this man resigned in order to run for governor of his province. I do not include as voluntarily resignations those of a few men who have endeavored by resigning to escape the necessity for replying to charges preferred against them with a view to their removal. Filipino district health officers and medical inspectors are in their own country where they can live far more economically than can Americans. They are without exception receiving salaries greatly in excess of any that were obtainable under Spanish rule. That these salaries are sufficient is shown by the extreme reluctance of their recipients to be parted from them. The inadequacy of the smaller salaries paid to American health officers is shown by the fact that men with families can not live upon them and in consequence a number of our most efficient medical inspectors have been lost to the service.

CERTAIN DEFICIENCIES OF FILIPINO HEALTH OFFICERS.

Our Filipino health officers without exception lacked, at the outset, the special training required properly to prepare them for combating epidemics and carrying on general sanitary work. I am glad to be able to state that several of them, profiting by the practical instruction that they have received in the provinces and in Manila, have become very efficient, but many of them when called upon to combat epidemic disease have proved completely powerless, as the cholera statistics conclusively show.

Furthermore I regret to state that other difficulties have been experienced in dealing with not a few of them. Their nature will be appreciated from the following correspondence:

A DISTRICT HEALTH OFFICER ASKS FOR ACCRUED LEAVE WHILE FIGHTING CHOLERA, WITH NO SUBSTITUTE AVAILABLE.

[Telegram received. (Translation.)]

AUGUST 30, 1907. Mandaon, via Milagros, August 28, 1907.

HEALTH, *Manila*:

Arrived 27 morning 17 deaths cholera since 9 desire approval appointment sanitary officer authorized province Lucas Lagari came with me.

RUIZ.

9.35 a. m., 30th.

[Telegram received. (Translation.)]

MANDAON (via MILAGROS), *August 31, 1907*. Filed Sept. 1, 1907.

HEALTH, *Manila*:

Days 28 one case one death; 29 no case one death; 30 two cases one death. Municipality does not furnish personnel vigilance impossible isolation focus.

RUIZ.

1.47 p.

[Telegram received.]

MASBATE, *September 1, 1907.*HEISER, *Manila:*

Found Dr. Ruiz at Mandaon. Seventeen deaths to date. Barrios quarantined against center of town. Municipal authorities doing nothing and Ruiz not even furnished men to bury dead. Have shaken things up.

WORCESTER.

8.03 a. m.

MANDAON, SORSOGON, *September 11, 1907.*

Ruiz wires:

"I rectify previous telegram. 811, 920, 1002. Municipality incompetent to enforce orders. There was a case yesterday in front presidencia building which was secreted until death. I will appreciate help of ten constabulary."

[Telegram received. (Translation.)]

MANDAON (via Milagros), *September 18, 20, 1907.*HEALTH, *Manila:*

16 one case one death 17 two cases one death I continue alone with provincial sanitary inspector for all work infected houses without guard. The quarantined go out for their needs. Not possible thus to localize the evil. Labors in vain. President does what possible but there are no people even to get water for disinfections. Councilors little active. If situation continues fatigue will overcome us. Order necessary obliging people voluntarily to aid. No one wants to; if they come, they soon make away.

RUIZ.

[Telegram received. (Translation.)]

SEPT. 24, 1907. Mandaon (via Milagros), Sept. 23, 1907.

HEALTH, *Manila:*

18 one one. 19 two zero. Twenty two one. 21 two one. 22 nothing. One pump useless. Sublimate received is powder send tablets.

RUIZ.

[Telegram received. (Translation.)]

MANDAON (via Milagros), *Sept. 28-Oct. 2, 1907.*HEALTH, *Manila:*

Five years without accumulated leave desire to enjoy it November. For this I must embark in Masbate October 16 on the Carmen the only boat which will leave there the first. Can bring a relief. Earnestly beg your approval. Await reply. Carbolic used up.

RUIZ.

[Telegram sent.]`

MANILA, Oct. 2, 1907.

RUIZ, Mandaon, (via Milagros, Masbate) :

No leave can be granted you until cholera has been completely exterminated.

HEISER.

Official Business.

VICTOR G. HEISER, *Director of Health.*

October 2, 1907.

Dr. JULIO RUIZ,

District Health Officer, Mandaon (via Milagros), P. I.

SIR: I have the honor to acknowledge receipt of your telegram of September 28, requesting leave of absence. As this telegram concerned your personal affairs it has been recommended to the Executive Secretary that payment from provincial funds be disapproved. *It is not understood why you have not reported the cholera situation in Mandaon instead of sending a rush telegram at Government expense requesting permission to abandon your duties at a critical time.*

An explanation of your conduct is requested.

Respectfully,

[Initialed] V. G. H., *Director of Health.*

In this instance the district health officer, Dr. Ruiz, applied for *leave* when combating a serious cholera epidemic with no one available to take his place. The reasons assigned by him for such a course were *that the necessity of living on chickens and boiled rice was making him sick and that he had long planned to take his vacation at that time.*

A DISTRICT HEALTH OFFICER DESERTS HIS POST AT THE LEPER COLONY.

[Translation.]

CULION, December 6, 1907.

DIRECTOR OF THE COLONY.

SIR: On the 25th of November, 1907, the Director of Health, Dr. Heiser, arrived in this colony, with whom I had an opportunity of conferring for the purpose of stating to the said doctor, as I did frankly, that it was not suitable to me to continue working in this colony for the salary of \$1,200 a year and of requesting him to allow me to leave Culion the following day on board the *Basilan*, which was the steamer on which the above-mentioned Director of Health came, and he replied to me that I should think it over before taking the said determination.

On the night of the said day, November 25, I went aboard the *Basilan* where Dr. Heiser was at the time, to communicate to him my last determination, as in fact I did, and which was to take passage on that steamer on the following day, because, I again repeated to him, it was detrimental to my interests to continue working in Culion for the salary paid me; to which Dr. Heiser replied that within ten days subsequent to my departure from Culion he would send another physician and that I could take passage on the same steamer on which the man who would relieve me was to come. On these conditions I assented to stay, continuing to render my services in the hospital of this colony, to the detriment of my interests on account of my being unable to leave Culion at once.

On this date, December 6, 1907, the ten days have elapsed within which Dr. Heiser promised me he would send a man to relieve me, and the latter not having arrived in this colony, I am of the opinion that from this date, the 6th, I am relieved from responsibility and from the services that I am rendering in the hospital of this capital, and I beg you, Mr. Director, kindly to take charge of this hospital from this date, for, in order not to continue harming my interests, it is my determination to depart from Culion on the first favorable opportunity that presents itself, to go to Manila where my wife, moreover, is in quite delicate health.

Very respectfully,

D. MONTINOLA,
District Health Officer.

[First indorsement.]

CULION LEPER COLONY DIVISION,
Culion, P. I., December 6, 1907.

Respectfully forwarded to the Director of Health.

After repeated conversations with Dr. Montinola, since the recent visit of the Director of Health to this colony, regarding the matter of the within communication, he leaves his assignment here against my protest, and without permission, or being relieved by the Director of Health, this to the prejudice of the service.

Dr. Montinola's services here have been exceedingly satisfactory, and it is with regret that it becomes necessary to report this insubordination.

J. H. BIGGAR.
Chief, Culion Leper Colony Division.

[Second indorsement.]

MANILA, P. I., *December 12, 1907.*

Respectfully forwarded to the honorable the Secretary of the Interior, through the Director of Civil Service, inviting attention to within communication and to the preceding indorsement.

It is true that on November 25 the Director of Health stated to Dr. Montinola that he would send someone to relieve him on the first boat that sailed from Manila to Culion. In view of the fact that no boat has left Manila for Culion since this statement was made to Dr. Montinola, it is evident that he left before he knew whether the Director of Health would keep his promise. As a matter of fact, the services of Dr. G. L. Bunnell were secured, and he was actually awaiting transportation to Culion at the time that Dr. Montinola left.

It might be further stated that prior to the occurrence of the foregoing incident, it was well known to the Director of Health that Dr. Montinola did not care to serve at Culion, and on this account every reasonable effort was made to secure the services of a competent Filipino physician. Several such men accepted the nomination, but when the day came for the vessel to sail for Culion, they declined to go. In view of these circumstances, over which the Director of Health had no control, the wish of Dr. Montinola that he be relieved from duty at Culion immediately could not be complied with.

It is ordinarily not considered very creditable for even a layman to leave a position of confidence and trust without giving adequate notice in advance; but it is absolutely inexcusable for a medical man to leave his post of duty, and more especially when by so doing he deserts a number of poor, sick unfortunates, who are dependent upon him for medical care and attention. Moreover such conduct is a serious breach of professional etiquette.

In view of the foregoing, it is evident that disciplinary measures are urgently demanded, and therefore the undersigned recommends that one month's accrued leave be deducted from any accrued leave which may be due Dr. Montinola, and, in addition, he be considered off duty without pay from the time he left Culion until he is assigned to another station, and that no traveling expenses be allowed him since he left Culion.

VICTOR G. HEISER, *Director of Health.*

MANILA, P. I., December 26, 1907.

Dr. D. MONTINOLA, *District of Health Officer, Manila.*

SIR: You are hereby informed that your action in leaving the Culion leper colony without permission, thereby deserting a number of sick patients of which you had medical care, is considered to be a most disgraceful act and one which should have merited your removal from the service; but in view of your satisfactory work at Culion prior to this occurrence, I have to inform you that you will be given an opportunity to redeem yourself. But so flagrant a violation of professional conduct can not be passed by without necessary disciplinary measures, so that you are respectfully informed that the Director of Civil Service and the undersigned have recommended, and the honorable the Secretary of the Interior has approved, that you be granted no accrued leave of absence for any service prior to the time of your leaving Culion, or, in lieu thereof, that you be fined one month's pay, and in addition, that you receive no salary from the time you left Culion until you reported at your new station, and that you be not allowed any traveling expenses in the meantime.

Letter directing you to your new station is forwarded herewith.

Very respectfully,

[Initialed] V. G. H., *Director of Health.*

In this case District Health Officer Montinola, who had become panic-stricken from being among lepers at the Culion Hospital, deserted his post, leaving the hospital full of sick persons when there was not sufficient help available to give them proper attention after his departure.

A CHOLERA EXPERT REQUESTED WHEN THE REGULAR DISTRICT HEALTH OFFICER WAS ON DUTY.

[Telegram received.]

MANILA, April 23, 1908.

HEISER, *Baguio:*

Following telegram received from provgov Capiz quote. Proboard believes services cholera expert necessary prevent general epidemic municipality Sapien forty cases twenty-nine deaths Ivisan twenty-two cases twenty deaths Capiz three cases two deaths. Take up with bureau health. End quote.

CARPENTER.

APRIL 28, 1908.

SIR: I have the honor to quote for your information and such other action as you may deem necessary the following telegram just received from the provincial governor of Capiz, in reply to one sent to him inquiring as to whether

the district health officer is unable to handle the cholera situation in the province in view of the request for a cholera expert:

“[Translation.]

“We are satisfied work health officer, but in agreement with him request cholera expert to assist him same as other years.”

Very respectfully,

F. W. CARPENTER,
Executive Secretary.

To the DIRECTOR OF HEALTH, *Manila.*

[First indorsement.]

BUREAU OF HEALTH,
Manila, P. I., April 29, 1908.

Respectfully returned to the Executive Secretary, with the information that on April 26, 1908, District Health Officer Araneta was directed to proceed to Capiz to aid in the eradication of cholera from that place.

VICTOR G. HEISER, *Director of Health.*

MANILA, P. I., *June 5, 1908.*

The DISTRICT HEALTH OFFICER, *Capiz, Capiz.*

SIR: It has been noted with each report that cholera still exists in your province and that the average number of cases reported daily in the town of Capiz has not varied for many weeks. An explanation is requested as to why a more effective campaign against this disease can not be inaugurated. It would seem that, with the large number of men and funds at your disposal, better results should have been obtained to date.

Very respectfully,

[Initialed] V. G. H., *Director of Health.*

A DISTRICT HEALTH OFFICER REFUSES TO OBEY AN ORDER TO GO TO A CHOLERA-SMITTEN TOWN, BECAUSE HE HAS THE ITCH.

[Telegram sent.]

MANILA, *January 17, 1908.*

Dr. EJERCITO, *San Fernando, Union:*

Governor Zambales reports cholera San Narciso. Proceed immediately take charge situation. Answer.

HEISER.

[Telegram received. (Translation.)]

SAN FERNANDO, UNION, *January 17, 1908.*

HEALTH, *Manila:*

Am sick. Impossible for me to travel.

EJERCITO.

[Telegram sent.]

MANILA, *January 22, 1908.*

Dr. EJERCITO, *San Fernando, Union:*

When will you be ready for duty?

HEISER.

[Telegram received. (Translation.)]

SAN FERNANDO, UNION, *January 23, 1908.*DIRECTOR HEALTH, *Manila:**Have itch; am making house my office. Shall advise when cured.*

EJERCITO.

Comment on the action of a district health officer who refused to obey orders to proceed to a cholera infected town *because he had the itch* would seem to be entirely superfluous.

THE "DELICATE HEALTH" OF A DISTRICT HEALTH OFFICER INTERFERES WITH THE DISCHARGE OF HIS DUTIES.

MANILA, P. I., *August 27, 1908.*Dr. FÉLIX BAUTISTA, *Malolos, Bulacan.*

SIR: With regard to the matter of suppressing cholera in the Province of Bulacan, I have the honor to request that you employ a sufficient number of sanitary inspectors to accomplish this object. The provincial board has been instructed by the Executive Secretary to furnish you every assistance.

I wish also to emphasize the necessity of impressing upon the municipal presidents that any work done by the provincial inspectors is to be considered as a reënforcement of the work already being done by the municipal authorities; in other words, the municipal authorities are to continue to do all they are now doing, and even after the disappearance of cholera in their municipalities, they must not relax their vigilance until all possibilities of reinfection have disappeared.

Very respectfully,

[Initialed] A. J. McL., *Acting Director of Health.*

DEPARTMENT OF THE INTERIOR,
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS.

[Telegram sent.]

MANILA, *September 8, 1908.*BAUTISTA, *Malolos:*

Valuable time lost. Employ authorized sanitary inspectors immediately. Place men Obando. Inspect each house every day. Find all live cases. You must stop further infection. Has Obando pumps and disinfectants. Your province worse than before. Waste no more time. Acknowledge.

McLAUGHLIN.

Official business:

A. J. McLAUGHLIN, *Acting Director of Health.*

Office Mail. Copy.

[Translation.]

THE PROVINCIAL GOVERNMENT OF BULACAN,
MALOLOS, P. I., *September 8, 1908.*

SIR: I have the honor to acknowledge receipt of your telegram received at this hour, 3.50 p. m., and to inform you that already ten sanitary inspectors have been assigned to Obando who will be inspecting that pueblo daily which has

been divided into ten districts, one for each of the said inspectors. There is a large quantity of disinfectants and only a pump is needed which several weeks ago was ordered from the provincial treasurer; however, the lack of the pump has been made up for by another means.

Rest easy that I will do all that is possible to the end that the infection in this province disappear within a brief space of time so that your desire may be obtained or realized *even at the sacrifice of my delicate health.*

Very respectfully,

FÉLIX BAUTISTA,

Chief District Sanitary Inspector, Malolos, Bulacan.

Hon. ACTING DIRECTOR OF HEALTH, Manila, P. I.

MANILA, P. I., September 9, 1908.

The DISTRICT HEALTH OFFICER, *Malolos, Bulacan.*

SIR: In reply to your letter of September 8 in which you speak of sacrificing your delicate health, *you are directed to inform this office immediately if your delicate health prevents the performance of your full duty, impairs your efficiency, or is responsible for the prolonged existence of cholera in Bulacan Province. If you are unable to display the activity and energy necessary at this time, you should wire this office immediately in order that a man who is able to display the required amount of activity and energy may be sent in your stead.*

Very respectfully,

A. J. McL.,

Acting Director of Health.

A DISTRICT HEALTH OFFICER DESERTS HIS POST UPON THE APPEARANCE OF CHOLERA.

[Telegram received. (Translation:)]

TAGUDIN, September 2, 1908.

HEALTH, Manila:

My wife seriously ill Cervantes would like to attend her. Cholera up to present 2 and 0.

CRISOLOGO.

4.50 p. m.

[Telegram sent.]

MANILA, September 3, 1908.

CRISOLOGO, Tagudin, Ilocos Sur:

Who is in charge of cholera work Tagudin. Maintain quarantine trails from Ilocos to Cervantes. Proceed Cervantes if doctor in Tagudin.

McLAUGHLIN.

Official business:

MYRON H. CHANDLER, *Chief, Clerical Division.*

[Telegram received.]

CERVANTES, September 4, 1908.

HEALTH, Manila:

Sanitarios only are in charge of cholera work.

CRISOLOGO.

[Telegram sent.]

MANILA, September 4, 1908.

CRISOLOGO, *Cervantes*:

By what authority did you leave Tagudin. Return immediately take charge cholera.

McLAUGHLIN.

Official business:

A. J. McLAUGHLIN, *Acting Director of Health*.

[Telegram received.]

TAGUDIN, September 4, 1908.

HEALTH, *Manila*:

Request American doctor for Amburayan. Three townships report cholera. Provincial doctor in Cervantes, no medicine.

Lt. Governor EVANS.

11.48 a. m.

[Telegram sent.]

MANILA, September 4, 1908.

EVANS, *Tagudin*:

Prodoctor left Tagudin without authority. Ordered return immediately.

McLAUGHLIN.

Official business:

A. J. McLAUGHLIN, *Acting Director of Health*.

[Telegram received at Manila, P. I. Rush.]

TAGUDIN, September 5, 1908.

ACTING DIRECTOR HEALTH, *Manila*:

Think you had better send someone here immediately to assist Lieutenant-Governor Evans in keeping cholera from spreading to Igorot barrio. Your health officer here is perfectly worthless and has abandoned his post and gone to Cervantes. Suspend your health officer here and inform him that I will immediately prefer charges against him requesting his removal for cause.

WORCESTER.

8.59 a. m.

[Telegram sent.]

MANILA, September 5, 1908.

CRISOLOGO, *Cervantes, Lepanto-Bontoc*:

You are suspended from duty pending immediate charges by Secretary of the Interior requesting removal for cause.

McLAUGHLIN.

Official business:

MYRON H. CHANDLER, *Chief, Clerical Division*.

[Telegram received.]

CERVANTES, September 5, 1908.

HEALTH, Manila:

Leave immediately for Tagudin.

CRISOLOGO.

9.55 a. m.

In this instance the district health officer made a false statement as to the cholera situation and then deserted his post without waiting for a reply from Manila. While it is true that his wife was ill her condition was not such as to justify this action on his part.

A DISTRICT HEALTH OFFICER WHO DID HIS DUTY.

Over against such conduct as that of this man I take pleasure in placing that of Dr. Candido Mora who, although in danger of losing the sight of one eye for lack of the necessary surgical attention, and wretchedly ill from another cause, stuck to his post without complaint or request for relief until ten days after the occurrence of the last case of cholera in his district. On the strength of his record he will be promoted to a position as medical inspector.

A DISTRICT HEALTH OFFICER FOREGOES TAKING LEAVE IN ORDER TO FIGHT CHOLERA.

Dr. Vicente de Jesus had come to Manila with the expectation of going on leave at the time the cholera situation in Pangasinan became critical. He was sent first to that province and subsequently to other provinces where emergencies existed and has performed cheerfully, faithfully, and efficiently the services asked of him although this special work has taken him outside of his health district and has occupied time which he had planned to spend in another way.

SUMMARY OF THE SITUATION AS REGARDS FILIPINO DISTRICT HEALTH OFFICERS.

When properly trained, Filipino district health officers have an immense advantage over Americans on account of the familiarity which they usually possess with the language, customs, and peculiarities of the people among whom their work must be carried on. In general, however, it must be said, that with individual exceptions, they are deficient in energy, executive ability and in a proper sense of devotion to duty. Many of them are strongly inclined to interest themselves in politics to the great detriment of their work and most of them are disinclined to obey orders promptly and cheerfully if directed to proceed to some province more or less remote from that in which they happen to wish to reside. In not a few instances they have displayed signal cowardice when confronted with epidemics of contagious disease.

Since Dr. Montinola fled, panic-stricken, from his post it has proved

impracticable to find a single Filipino physician willing to accept appointment at the Culion leper colony and to continue to serve his own countrymen there. The work for lepers at this place is performed exclusively by American physicians and hospital stewards, Spanish and American Jesuit priests and French Sisters of Charity.

I believe that the young men now being trained in medicine and surgery at the Philippine Medical College and at the University of Santo Tomas will be not only far better equipped as regards technical training than are most of our present district health officers but imbued with a proper sense of the responsibility to the sick and to the public at large which necessarily rests upon those to whom is given the right to practice medicine and surgery. These young men should be given practical experience at Manila in sanitary work as a part of their regular course of study. Upon their graduation they should be appointed as sanitary inspectors or municipal health officers and after having gained the necessary practical experience should be given an opportunity to display executive ability. Those who demonstrate that they possess it should be promoted to more responsible positions as rapidly as vacancies occur. In this way we may hope ultimately to build up a thoroughly efficient force.

Let it not be imagined that this belief is idle optimism. I base it, in a large measure, on the admirable spirit shown by the students from the Philippine Medical College and from Santo Tomas University and on that displayed by the four young Filipina nurses from the Normal School, who volunteered for duty at the San Lazaro cholera hospital and who, with the dead and dying all about them, rendered coolly and efficiently disgusting services for which money could not adequately pay them, *in the full knowledge that the least carelessness or neglect in the matter of disinfecting their own persons would be likely promptly to change their status from that of cholera attendants to that of cholera patients!*

I do not need to be told how these young men and women performed their work because I watched them not only by day, when they knew that they were under observation, but in the small hours of the night when they could have had no knowledge of my presence.

Among the many pitiful and tragic scenes impressed upon my mind is that presented by a poor old wreck of a beggar woman delirious and constantly starting up and trying to leave her bed but calmed, restrained and made to lie down again by a Filipino boy of excellent family who treated her as gently and considerately as if she had been his own mother.

The young men and women who did this work showed that spirit of self-sacrifice and devotion to duty which Americans are accustomed to associate with the practice of the professions of physician and nurse. When to the spirit already displayed by these young men and women there have been added the necessary years of instruction and experience,

then and not until then will it be possible to discontinue the bringing of physicians and nurses from the United States to perform the work imposed by law and by duty upon the Bureau of Health.

WHAT THE BUREAU OF HEALTH HAS ACCOMPLISHED AND WHAT IT HAS FAILED TO ACCOMPLISH.

The force of health officers heretofore available has proved sufficient rapidly to push through three great sanitary reforms, namely the complete elimination of bubonic plague from the Philippine Islands, the rapid segregation of lepers and the vaccination of almost the entire population of the Islands against smallpox. The practical results of the latter work are exemplified if we compare the deaths from smallpox at Manila for the past six years with those which occurred from 1891 to 1896, inclusive:

	Deaths.		Deaths.
1891	359	1903	23
1892	51	1904	29
1893	863	1905	2
1894	926	1906	5
1895	13	1907	1
1896	488	1908	116
Total	2,700	Total	176

The figures for the period from 1891 to 1896 are taken from the church statistics for a part of the city of Manila only and are therefore not complete.

The force available has furthermore been able to prevent any general epidemic of cholera in Manila but *it has proved grossly inadequate materially to improve other sanitary conditions in the provinces or effectively to prevent the spread of cholera there.* In the effort to strengthen the provincial force and to meet disastrous conditions in the provinces Manila has again and again been stripped of its available men with the result that cholera has for brief periods become epidemic and has then been brought under control only by the most strenuous efforts on the part of a force wearied almost to the point of collapse by the uphill struggle in the provinces, aided by every other man who could be obtained from any source whatsoever.

THE SCANTY FORCE OF THE BUREAU OF HEALTH MAKES IT NECESSARY TO CALL ON OTHER BUREAUS FOR PHYSICIANS.

During the present epidemic it has been necessary to call on the Bureau of Science and the Philippine Medical School for reënforcements.

ASSIGNMENT OF BUREAU OF SCIENCE MEN.

Dr. Richard P. Strong, Director of the Biological Laboratory, was assigned as attending physician at the Mary J. Johnston Hospital, used for cholera cases.

Doctors Oscar Teague and Fred B. Bowman were assigned to duty at the same institution.

Dr. Vernon L. Andrews was assigned to duty at San Lazaro Hospital as was Mr. N. T. Clegg.

ASSIGNMENT OF PHILIPPINE MEDICAL SCHOOL MEN.

Dr. Philip K. Gilman, in charge of the San Lazaro cholera hospital.

Dr. Potencio Guazon, on duty at the San Lazaro cholera hospital.

Dr. Ariston Bautista-Lin, on duty in the afternoons at the San Lazaro cholera hospital.

RESULTING INTERRUPTIONS TO WORK.

While under the circumstances it was fortunate that the Bureau of Health could draw on the Bureau of Science and the Philippine Medical School for experts at this time it is greatly to be regretted that it was necessary to do so.

The interruption to the work of the Medical School was perhaps, on the whole, not serious as the young men sent to the hospital had an opportunity while there to gain valuable practical experience, but the calling away from the regular work of the laboratory of practically the entire force was greatly to be regretted as there have arisen in connection with this epidemic biological problems of great importance which demanded immediate investigation.

THE DISCOVERY OF BACILLI CARRIERS AT MANILA DURING THE EPIDEMIC OF 1908.

The not infrequent occurrence of cases of cholera in Bilibid Prison when every possible precaution had been taken to safeguard the food and drink of the prisoners, led to the suspicion that there might be persons who were infected with cholera vibrios without being ill and that they were disseminating infection which was proving fatal to others. By direction of the Acting Director of Health, two hundred and sixty-four convicts were accordingly examined with the result that cholera vibrios were found in the stools of seventeen of them. These organisms were typical and were conclusively demonstrated to be virulent.

Similar examination of three hundred and seventy-six residents of Meisic, one of the worst infected districts of the city, showed cholera vibrios present in twenty-seven, or 7.18 per cent, of the cases. Here then was a hidden source of active infection beyond the reach of disinfectants. It should have been possible to put a large part of the force of the Biological Laboratory on the work of discovering these bacilli carriers so that they might be treated until they were freed from cholera vibrios, and to the end that the question of whether the lack of symptoms of cholera in such cases is due to natural immunity to the disease or to the swallowing of attenuated cholera organisms which have become virulent in

passing through the intestines. It is feared that by the time the laboratory force can be spared from other and more immediately pressing work for this investigation, the opportunity for it will have passed through the disappearance of the material, as happened in Germany.

IS CHOLERA ENDEMIC IN THE PHILIPPINES?

In view of the established facts we must admit not only that it is but that it has long been so. I have already had occasion to refer to the Memoir of Dr. Francisco Masip y Valls which was written in 1889 but was not published until 1896 and even then appeared with a preface entitled "Informe Sobre Esta Obra Emitido por la Universidad de Manila," in which the medical faculty of that institution severely criticise the able author and rather fiercely attack some of his conclusions which in point of fact were unassailable. Among other statements Dr. Masip y Valls makes the following:

Previous to our being so fortunate—or unfortunate—as to be eyewitnesses of the ravages of cholera morbus in the Philippine Islands, we eluded with well-founded prudence the admission of a certain belief regarding its pathogenesis; but now we should proceed in quite a different manner in judging the data and facts regarding which we can give full evidence, inasmuch as the culminating events which developed in our sight, all authorize us to declare that the epidemic which occurred in the pueblo of Taytay, in the District of Morong, in the year 1883, and which did not spread beyond the confines of that locality, was due to the revivication of the germs of the epidemic that had been general throughout the Archipelago during the preceding year, just as cholera morbus of 1888 was generated at Taytay under identical conditions and spread forthwith from this center of infection to other places in these Islands which suffered from the disease in an endemo-epidemic form.

With regard to this country, we can state that the sanitary conditions of the town of Taytay are of the worst possible and therefore are of the most favorable in order that, as Dr. Marchal said in 1866, "the specific cause of cholera, which dwells in the malarial maïssima exclusively, raised to its highest potency, may live in it like ferments, and, like them, multiply and develope." (Marchal, *Lettres et propositions sur le choléra*, 1866.) Taytay is situate in a depression, bounded on one side by the Antipolo Mountains and on the other by the immense lake called the "Laguna de Bay," near the place where it drains into the Pasig River, a stream as muddy as the Nile, the Ganges, or the Mississippi. The soil of the town and its surroundings is made up of alluvial deposits which are exceedingly favorable to all sorts of organic fermentations of a putrid character when the periodical inundations increase the foul growths. It has been at all times a permanent dumping-place for filth and animal and vegetable offals, the refuse of human life, which has the privilege of converting the soil into a focus of deleterious emanations that maintain proteiform intoxication in an endemo-epidemic form in that region. On the other hand, the inhabitants are exceedingly poverty stricken and dirty, are very poorly nourished, and use brackish water which they get from ill-conditioned and worse kept wells. In some parts of the town proper the people live too close together and their traditional indolence and apathy does not permit of their having any other occupation than that of doing nothing.

To conclude: I maintain my belief that the cholera has been and can be generated in the Philippine Islands by importation, but it can also originate—and actually has originated—in this very soil, which we may call a secondary focus of the Asiatic cholera morbus. I base this opinion on the fact that it has already been demonstrated that soil like that of Taytay is capable of sustaining and propagating morbid causes analogous to those proper and peculiar to the places bathed by the Cambodia and, we might even say, to the rectangle formed in the Sunderbunds by the great rivers Brahmaputra and Ganges.

Interesting confirmation of the belief of Dr. Masip y Valls that cholera originated at Taytay in 1883 and 1888 is furnished, so far at least as concerns the latter epidemic, by certain newspaper criticisms. The press of that period contended, as did the press in 1902, that the “prevailing ailment” could not be cholera, a reason assigned being that its spread was less rapid and the mortality lower than had been the case during previous epidemics of cholera in the Philippines and in Europe; another was that some of the sick had fever while others were cold when they died; and finally it was said “a disease which had its origin in the midst of an interior province, the District of Morong, without direct communication with any marine port can not be cholera because no one could have transported germs thither from without, without first leaving them in the coast towns.”

Let us remember that the epidemic which is variously stated to have begun in 1817, 1819, and 1820 at all events continued during the years of 1821–22–23 and 1824; that there were epidemics in 1830, 1842, 1854, 1863–1864 and 1865, 1882, 1885 and 1888–1889; that on one day during the epidemic which began in 1882 the number of deaths in Manila was 34 times the largest number that has occurred on any one day since the American occupation. Remembering, too, that the reporting of Asiatic cholera as such was prohibited during the greater part of the period from 1883 to 1897, inclusive, let us give due attention to the following table showing in summary form the deaths recorded in the churches of a part of the territory now constituting the city of Manila, due to cholera or to some disease closely resembling it:

Year.	Enterocolitis and gastro-enteritis.	Cholera.	Deaths.
1883	878	500	1,378
1884	70	4	74
1885	104	8	112
1886	240	8	248
1887	394	4	398
1888	479	133	612
1889	487	595	1,082
1890	616	6	622
1891	488	2	490
1892	715	0	715
1893	703	0	703
1894	665	0	665
1895	954	1	955
1896	1,106	0	1,106
1897	791	4	795
Grand total	8,690	1,265	9,955

Passing over the years from 1898 to 1901, inclusive, during which the existence of war, the withdrawal of the Spanish forces and the somewhat tardy reoccupation of the territory which they abandoned by the American forces, have rendered it impossible to get any record, let us remember that cholera in severe epidemic form appeared at Manila on March 20, 1902, and that it is known to have continued to occur either in Manila or in the provinces ever since except for the period, from March 23, 1904, to August 20, 1905, and that from April 27 to July 23, 1907.

Remembering that it is not certain that the infection of 1902 was imported from without; that the 1905 epidemic apparently originated in the vicinity of Taytay as did previous epidemics in 1882, 1888 and 1889, and that the cholera which appeared in the Visayan Islands in 1906 and that which appeared at Iloilo in September, 1906, and that which appeared at Capiz in April, 1908, were never traced to any outside source, let us clearly face the inevitable conclusion that cholera has been endemic in the Philippines during much, if not all, of the time from 1882 to the present day, and probably for a much longer period.

Table showing the total number of cholera cases and deaths since the American occupation.

Epidemic.	Cases.	Deaths.
Manila:		
March 20, 1902, to March 23, 1904	5,581	386
August 23, 1905, to March 21, 1906	278	248
May 8, 1906, to November 27, 1906	820	717
July 13, 1907, to March 18, 1908	426	361
June 8, 1908, to October 24, 1908	853	572
Total for Manila	7,958	6,279
Provinces:		
March 23, 1902, to March 8, 1904	160,638	105,082
August 20, 1905, to April 29, 1907	13,026	9,303
July 22, 1907, to October 19, 1908	21,212	13,635
Total for the provinces	194,876	128,020
Total for Manila	7,958	6,279
Grand total	202,834	134,299

LITTLE DANGER FROM CHOLERA TO THOSE WILLING TO TAKE ORDINARY PRECAUTIONS.

Of the 202,172 cases and 134,102 deaths which have occurred in the Philippines from cholera since the American occupation only 248 cases and 124 deaths have been among Americans and this in spite of the fact that during much of this time there have been a large number of American soldiers in the Islands. It would be impossible to give a more conclusive demonstration of the fact that both in Manila and the provinces the danger of infection with cholera is very slight for persons who are willing to take the trouble to observe ordinary precautions.

SUMMARY AND CONCLUSION.

I have endeavored to show that Asiatic cholera has long been endemic in the Philippine Islands. While this condition of affairs continues it will doubtless from time to time become epidemic. What then are we to do?

Climatic and topographical conditions are unquestionably favorable to the indefinite continuance of endemic cholera, and over climatic conditions at least we can exercise no control.

The ignorance and superstition of the common people and certain of their customs, especially that of eating with their fingers, favor the rapid spread of cholera when it becomes epidemic. These conditions can be remedied only by a patient and persistent educational campaign.

Fortunately a portion of the public press is disposed actively to aid the efforts of the authorities to eradicate cholera. With that portion which through ignorance is earnestly but mistakenly opposing the employment of modern sanitary methods an educational campaign will ultimately prove successful, while to that portion which is deliberately vicious, which attacks the health officers because it believes such a course likely to be popular, and which plays politics at the expense of the lives of the people whose interests it professes to advocate, the law must be applied.

In order that we may ascertain more definitely what can be done toward removing the more or less permanent local sources of infection, a careful, patient and exhaustive scientific investigation must be made through the joint efforts of the Bureau of Health and the Bureau of Science so that we may learn, if possible, to identify cholera organisms no matter what the form which they may assume under varying conditions of environment, and being able thus to identify them may find the places in which they are lurking even when the disease is not present in active form, and may cleanse such places.

However, there is no reason why we should delay beginning to put our house in order pending the result of such investigation. There are to-day within the city limits numerous thickly populated areas of considerable extent without streets, drains or any receptacles for human excreta or other filth. As a necessary result there exist in these regions thousands of seething sinks of fermentation and putrefaction in which we *know* without examination, that cholera germs swarm. Streets must be opened into these regions. Public pail sheds must also be built and those who fail to use them must be punished.

Unsanitary conditions which can be remedied by cleaning out the esteros and constructing drains and ditches to connect with them must be dealt with *immediately* and those which can be remedied only by filling must receive attention as rapidly as the condition of the city finances will permit.

[That money may be made available for this work there must be an abandonment for the present of expensive projects for beautifying the city and there should follow in the immediate future the imposition of a reasonable tax upon the private property in the city in order that the necessary funds may be secured for putting unsanitary districts into decent condition.

Last but by no means least there must be an immediate and radical change in the present attitude of the municipal authorities in the matter of the enactment and enforcement of the necessary building ordinances to compel private individuals to do their share toward improving health conditions, or the power to inspect buildings under construction and to enforce such ordinances must be taken from the city and given to the Bureau of Health.]

In connection with other scientific investigations, careful bacteriological examination of the feces of numerous persons not suffering from cholera must be made and these examinations must continue during a considerable period of time in order that we may ascertain whether "bacilli carriers" are to be met with after the cessation of an epidemic and to what they owe their immunity to the evil effects of the infection which they carry and so readily communicate to others.

Whether or not we can entirely rid the Philippines of the cholera infection which has so long remained endemic in the Islands no one can at present say, but certainly no effort to this end should be spared. If we do not succeed in accomplishing this we shall inevitably be called upon to meet frequently recurring epidemics. Even if we are fortunate enough to achieve a result so greatly to be desired there will still remain the ever-present possibility that infection will be reintroduced from without along one of the now numerous lines of trade which keep us in touch with Japan, China, India, Java, Borneo, Australia, New Guinea, and Celebes.

In this connection the experience of Japan is both interesting and instructive. I am indebted to Dr. Ohno for the following table showing the occurrence of cholera in Japan since 1893:

Cases.		Cases.	
1893	633	1902	13,362
1894	546	1903	177
1895	55,144	1904	1
1896	1,481	1905	0
1897	894	1906	0
1898	655	1907 (Aug. to Jan., 1908)	3,268
1899	829		
1900	378	Total	77,649
1901	101		

If, as has been so often stated recently in the public press of Manila, the occurrence of a cholera epidemic, with our present scientific knowledge of methods for combating the disease, is a crime, crime would seem to have been rather prevalent in Japan of late! When it is remembered that climatic conditions in Japan, with its cold winters, are not such as to favor the continued presence of cholera; that it is claimed that the infection of each of these outbreaks was brought in from some foreign country; that the Japanese are an extraordinarily cleanly people and amenable to sanitary regulations and that there exists in Japan a large corps of admirably trained and highly efficient medical officers, it is only too painfully evident that in the Philippines with their tropical climate lying within easy reach of the great disease-breeding centers of population in China we can not hope to escape.

It has been said that a properly organized and administered Bureau of Health *would prevent the occurrence of cholera epidemics*. Such a contention is absurd. It would be just as logical to maintain that a large, brave, well-organized and well-equipped army will certainly protect a country from war. It will decrease the probability of war and increase the chances of ultimate victory. A well-organized and thoroughly efficient health force will decrease the probability of the occurrence of epidemics, will shorten their duration when they do occur, and will decrease the mortality which they cause, but that is all. We must, therefore, hold ourselves always in readiness to deal promptly and effectively with cholera epidemics.

The fundamental principle involved in dealing successfully with them is to attack the infection actively the instant it appears. Over and over again within the last few years we have dealt with first cases, both in Manila and in provincial towns, so effectively that there have been no subsequent cases; but this can be done only when energetic, capable and thoroughly trained men are immediately available. It is self-evident that we must organize and maintain an adequate force of such men, and that this force must, from the nature of its work, be both highly mobile and thoroughly disciplined. To this end it should serve under the immediate control of the Director of Health and any of its members who, for trivial reasons, fail promptly to go where they are sent, or who prove themselves to be lacking in initiative and in executive ability to such an extent that they can not check cholera under reasonably favorable circumstances, should be promptly removed.

Fortunately, provision has now been made for a force reasonably adequate to protect Manila, but this force will be kept constantly on the defensive unless the provinces are freed from infection. In my opinion there should be in every province at least one really competent district

health officer selected under civil-service rules and paid from the Insular Treasury.

There should be always on hand, at some convenient central point in each province, an adequate supply of disinfectants and spraying pumps so that time may not be lost in sending to Manila for such things. The additional expense involved in carrying out this program would be insignificant in comparison with the resulting benefits.

The less said of the work of our present presidents of municipal boards of health the better. They *exist* in 257 of the 655 municipalities of the Philippines, and that is about all.

Here and there an active and capable president of a municipal board of health, supported by a really capable municipal council, has done excellent work, but in only too many cases presidents of municipal boards of health are neither active nor capable, or when they are possessed of these qualities find themselves hopelessly handicapped through lack of financial support by the municipal council, or of moral support by the municipal president. Furthermore the salaries paid them are often so excessively small that it would be unjust to expect them to devote much time to their duties.

A thoroughly capable district health officer can, as a rule, galvanize slothful municipal officials into action especially if he has the vigorous support of the provincial authorities. Nevertheless the necessity for competent municipal health officers is too evident to admit of discussion. Unfortunately the problem of providing them involves not only a large expenditure but another serious difficulty arising from the lack of anything like a sufficient number of competent and available physicians.

It was to help meet this lack that the Philippine Medical School was established. Within a few years graduates from this school will begin to become available. The medical course at the University of Santo Tomas is now being rapidly improved, and to this institution we may also look in the future for capable, energetic and thoroughly trained young physicians.

Thus we shall ultimately develop an adequate force of competent men, but while this development is in progress we must, so far as practicable, utilize the services of men who may prove to be reasonably competent in spite of their lack of technical training. In my opinion it is useless to expect the municipalities, especially those of the third and fourth classes, to pay salaries adequate to secure the services of such men, and it would seem entirely obvious that if the Insular Government is to pay their salaries it should control their appointment, their assignment to duty and their removal.

In some instances provincial municipalities are so near each other, or have such good facilities for intercommunication, that one capable municipal health officer might well have charge of two or even three of them.

Provision should be made for an adequate number of municipal health officers at reasonable salaries. They should be selected under civil-service rules and paid by the Insular Government. Until a sufficient force of duly qualified physicians is available the employment as municipal health officers of competent men who lack medical training should be authorized.

The expense involved in this latter reform would be beyond the present means of the Insular Government unless there were made a material reduction in the expense annually incurred for educational work and this would seem highly undesirable. I am of the opinion that the present internal-revenue taxes should be increased one-third of one per cent, and the ₱1,300,000 of revenue resulting should be made a special fund expendable along the lines above indicated for the improvement of sanitary conditions in the provinces of the Philippines. Such an addition to the taxes at present collected might perfectly well be made and would still leave the inhabitants of the Philippine Islands the lowest taxed civilized people of the world. Our present per capita tax is but ₱3.82 per year as compared with ₱7.17 for Turkey, ₱9.97 for Bulgaria, ₱10.11 for Servia, ₱11.56 for Greece, ₱12.56 for Switzerland, ₱12.61 for Japan, ₱14.91 for the United States, ₱16.33 for Roumania, ₱16.62 for Denmark, ₱17.14 for the Russian Empire, ₱19.29 for Sweden, ₱19.94 for Germany, ₱21.33 for Norway, ₱21.37 for Spain, ₱21.40 for Portugal, ₱22.29 for Italy, ₱22.86 for Hungary, ₱24.40 for Netherlands, ₱35.14 for Great Britain, ₱35.22 for Austria, and ₱36.64 for Belgium.

In closing I wish to express my very sincere thanks to Archbishop Harty and Father Chouza for making it possible for me to secure statistics from the church records of Manila without which this report would have been very incomplete.

Respectfully submitted.

DEAN C. WORCESTER,
Secretary of the Interior.

To the PHILIPPINE COMMISSION,
Manila P. I.

APPENDIX TO A HISTORY OF ASIATIC CHOLERA IN THE PHILIPPINE ISLANDS.

GENTLEMEN: The original edition of my special report to you, entitled, "A History of Asiatic Cholera in the Philippine Islands," was exhausted without supplying the demand for it, so that its republication has become necessary.

In republishing it I have improved the opportunity to correct some errors which crept into statistical tables. It has, furthermore, seemed advisable to me to add an appendix bringing the report up to date. Indeed I deem this essential, for the reason that an opinion of the Attorney-General, rendered at the request of the Acting Insular Auditor, has been used in such a way as to obfuscate one of the most important questions which has been at issue between the Municipal Board and the Bureau of Health, and to mislead the public.

THE OPINION OF THE ATTORNEY-GENERAL RELATIVE TO THE POWER OF THE CITY OF MANILA TO COMPEL PRIVATE OWNERS TO FILL AND DRAIN THEIR LOTS AND AS TO THE COURSE WHICH SHOULD BE PURSUED BY THE DIRECTOR OF HEALTH IN ABATING NUISANCES.

The following correspondence shows how this opinion came to be rendered. It will be noted that the problem which resulted in eliciting it was a drainage problem pure and simple, and that the general question of nuisances and the manner in which they might be abated did not enter into it, except that the Acting Insular Auditor in his seventh indorsement, under date of December 17, 1908, asked—

"whether the property owners can be compelled by process of law to make this necessary improvement which appears to be in the nature of an abatement of a nuisance so far as the improvements are on the lands of such property holders. Where the improvements lie in the street it is admitted that it should be done by and at the expense of the city."

MANILA, October 30, 1908.

The ACTING DIRECTOR OF HEALTH, *Manila*.

SIR: In compliance with your instructions calling for a preliminary report upon the project for the correction of insanitary conditions in the barrio of Santa Monica, Tondo, I have the honor to submit the following.

The barrio of Santa Monica extends from Calle Azcarraga, near the present Manila railroad station, a distance of some 1,200 meters. As the larger part of the barrio is in a district where light-material construction is permitted, most of the houses are of this nature. The elevation of the road or street from

Azcarraga into the barrio varies from 1.72 meters to 1.91 meters. The general elevation of the land on either side, on which houses have been constructed, varies from 1.2 meters to 1.4 meters, showing that the land is from 1.4 meters to 2 meters above mean low tide and from 0.7 meter to 1.3 meters above high tide.

A sketch is submitted, from which it will be seen that Estero de la Reina, suitable for drainage purposes is adjacent to this barrio. There is a long slue at the upper end of the barrio which is particularly objectionable, and which it is believed is the principal feature which it is desired to modify in the contemplated improvements. The natural drainage is on the side toward the Estero de la Reina, the outlet being shown on the map by a dotted blue line. The elevation of the slue is 1.1 meters above datum.

The simplest solution for the correction of this insanitary feature is that the slue be drained by means of a large ditch, having a width on top of about 2 meters, with depth of about 1 meter, or more if necessary, depending upon the slight variations of the level of this surface. The side of the ditch should have a pronounced slope. A simple tide gate should be constructed at the point shown on the map.

An examination of the sketch shows that about 1,200 meters of ditch at the upper end should be built. In addition to this 2,000 more meters of ditch with another 800 meters to connect with the estero should be built to drain both sides of the main street of Santa Monica.

The cost is estimated as follows:

1,200 meters of ditch (Santa Monica-Palumpong system),	
1,200 cubic meters, at ₱1.....	₱1,200.00
2,800 lineal meters of ditch (Santa Monica-street system),	
2,000 cubic meters, at ₱1.....	2,000.00
1 tide gate at point shown on sketch.....	100.00
Ten 15-inch tile culverts, at ₱50.....	500.00
20 per cent for contingencies.....	760.00
Total	4,560.00

The above is based upon the following assumptions:

All tools or other equipment or material temporarily used on the work to be furnished by the municipality without being charged to the work.

All engineering service and general supervision, with the exception of the immediate foremen regularly detailed on the work, to be furnished by the municipality without being charged to the work.

Coincident with the above there should be a definite street system decided upon for this locality and laid out and permanently monumented by the municipality, all new construction being made to conform thereto. This, however, will not necessarily mean an additional appropriation, as the work can probably be done by the regular field and office force out of regular appropriations. In no other way can the minor interior drainage of a nipa barrio be readily handled.

The work should be undertaken by the municipality as an emergency measure under the general supervision of the Bureau of Health in accordance with the provisions of section 793 of the Revised Ordinances.

As there are some forty landowners involved in this drainage problem it will be impracticable to expect the work to be done by private owners.

Very respectfully,

G. H. GUERDRUM,
Chief, Division of Sanitary Engineering.

[First indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, P. I., November 19, 1908.

Respectfully forwarded to the honorable the Secretary of the Interior.

It is urgently recommended that provisions be made for the execution of the drainage as recommended in the within report, at a cost of ₱4,650.

For a system of streets and alleys, it is urged that the Municipal Board have plans prepared for a complete system covering the entire territory from Calle Morriones to Calle Solis, and from the Estero de la Reina to Estero de San Lázaro.

A. J. McLAUGHLIN,
Acting Director of Health,
 G. H. G.

[Second indorsement.]

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
 DEPARTMENT OF THE INTERIOR,
Manila, November 24, 1908.

Respectfully referred, through the honorable the Governor-General, to the Municipal Board, recommending that serious consideration be given to this project, which the undersigned understands has been investigated and approved by Major Case as a feasible and comparatively inexpensive method of improving the sanitary condition of this district which is at present exceptionally bad.

DEAN C. WORCESTER,
Secretary of the Interior.

[Third indorsement.]

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
 EXECUTIVE BUREAU,
December 1, 1908.

Respectfully referred to Municipal Board, Manila, inviting attention to second indorsement. Prompt return of these papers is requested with report of action taken.

JAMES F. SMITH, *Governor-General.*

[Fourth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,
December 3, 1908.

Respectfully referred to the city engineer for recommendation.

By direction of the Board:

H. L. FISCHER, *Secretary.*

[Fifth indorsement.]

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,
Manila, December 14, 1908.

Respectfully returned to the secretary, Municipal Board, recommending that the work herein laid down by the Director of Health be immediately undertaken, and the unexpended balance of special appropriation for public works, "Dredging of esteros—Ordinance 105," be drawn upon for cost of labor and material. This balance at present amounts to approximately ₱9,000, and it is believed will be sufficient for the work herein specified, and also that desired for the district of Ermita, as expressed in your file No. 9476-A2. It is possible that there may be some claims for compensation due to occupation of private property, but as

the land actually required for that purpose is very small in extent, it is believed that the charges to this account, if any, will be slight.

It is respectfully recommended that the sanitary engineer be requested to show, in detail, the proposed construction of tide gate, and its location.

W. P. WYLIE, *City Engineer.*

[Sixth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,

December 15, 1908.

Respectfully returned to the Insular Auditor, inviting his attention to the fact that a large part of this work will probably be done on property not owned by the city, and requesting his approval to the use of unexpended moneys in the cholera emergency fund for this purpose.

By direction of the Board:

H. L. FISCHER, *Secretary.*

[Seventh indorsement.]

BUREAU OF AUDITS,

Manila, December 17, 1908.

Respectfully forwarded to the Attorney-General for advisory opinion whether the property owners can not be compelled by process of law to make this necessary improvement which appears to be in the nature of an abatement of a nuisance so far as the improvements are on the land of such property holders. Where the improvements lie in the street it is admitted they should be done by and at the expense of the city.

Prompt return of this paper is requested,

W. H. CLARKE, *Acting Auditor.*

[Eighth indorsement.]

MANILA, P. I., *December 24, 1908.*

SIR: It appears from the correspondence accompanying your indorsement of December 17, 1908, that certain real estate of private ownership in the city of Manila is in a highly insanitary condition and that the municipal authorities desire to have the same remedied. The Municipal Board requests your approval of the use of unexpended moneys in the cholera emergency fund for this purpose, and you request an advisory opinion as to whether the property owners can not be compelled to make the necessary improvement at their own expense.

There is no question that lot owners may be constitutionally required to drain and fill up their lots at their own expense and that the power may be delegated to the municipal authorities. Legislation of this character is sustained as a legitimate exercise of the police power for preservation of the public health. In order, however, for a municipality to exercise this power it must be clearly and unquestionably conferred. (*City of Rochester vs. Simpson*, 31 S. E., 821; *City of Lawrence vs. Webster*, 46 N. E., 123; *Bliss vs. Kraus*, 16 Ohio Stat., 55; *City Council of City of Charleston vs. Werner*, 17 S. E., 33.) Said power is clearly conferred upon municipalities organized under Act 82 in section 39 (n) as follows: The municipal council shall—

“require any land or building which is in an insanitary condition to be cleansed at the expense of the owner or tenant, and, upon failure to comply with such an order, have the work done and assess the expense upon the land or building.”

I find, however, upon examining the Charter of Manila as amended that no

such power is given to said city, and I therefore advise you that the city of Manila has not the power to do this work at the expense of the owners of the property. I think, however, that the desired result may be obtained by another method. Act 1150 as amended makes the Bureau of Health the local Board of Health for the city of Manila and gives it power to draft, for enactment by the Municipal Board, health ordinances for said city. Section 3 (r) of said Act empowers the Board to provide in the ordinances so drafted by them "declaration, definition, and prohibition of nuisances dangerous to the public health." This, the said Bureau of Health has done in the Sanitary Code of Manila, which was duly enacted by the Municipal Board and is found in the Revised Ordinances of said city. Section 809 (h) of the Revised Ordinances of said city declares as a nuisance—

"any accumulation or deposit of stagnant water, sullage water, manure, house refuse, or other matter, wherever situated, which is unhealthful or obnoxious."

Section 810 of said ordinances provides, among other things:

"No owner or occupant or other person in charge of any lot, tenement house, premises or building, or other place whatsoever, shall allow or permit any nuisance to exist in such lot, tenement house, premises, building or other place * * *."

Section 813 of said ordinances provides:

"Any person in the city of Manila who shall violate any section or part thereof of this title or of title fourteen of chapter seventeen hereof or any regulation made in accordance therewith may be proceeded against as prescribed by the provisions of section five of Act Numbered Eleven hundred and fifty of the Philippine Commission."

Section 814 of said ordinances provides for a fine of not more than ₱200 or by imprisonment for not more than six months, or by both such fine and imprisonment, in the discretion of the court, for each offense, upon conviction of the violation of any of the aforesaid sanitary provisions.

Section 5 of Act No. 1150 referred to in section 813 of the aforesaid municipal ordinances provides as follows:

"The Director of Health, or any health officer duly appointed by him, is empowered, and it shall be his duty, to make complaint under oath in writing against any person violating any health ordinance before the municipal court of Manila, and it shall be the duty of that court to issue a warrant for the arrest of such person so complained of, and when arrested to try him as in other cases of violations of city ordinances: *Provided*, That nothing herein contained shall be construed as preventing any municipal officer or any person from also making such complaint."

It is within the power and clearly the duty of the Director of Health to notify the owners of the property in question of the maintenance by them of the said nuisance thereon and requiring that they shall, within the time and manner specified in the notice, abate the same, and should such property owners neglect or fail to so do, they are then subject to prosecution for the maintenance of said nuisance in the manner provided in the provisions of law hereinbefore quoted, and, as the nuisance is a continuing one, the owners may be repeatedly prosecuted and fined or imprisoned, or both, until they shall have complied with the requirements of the orders of the Bureau of Health in the premises.

Very respectfully,

IGNACIO VILLAMOR, *Attorney-General*.

ACTING INSULAR AUDITOR, *Manila*.

[Ninth indorsement.]

EXECUTIVE BUREAU,
Manila, January 14, 1909.

Respectfully returned to the Municipal Board, inviting attention to indorsement of this date from this office on Executive Bureau file No. 76352-A44, Municipal Board file No. 9476-A2.

Please advise the approximate cost of securing the street areas and rights of way for the drainage described in the within report.

JAMES F. SMITH, *Governor-General.*

This opinion, which was rendered during my absence from Manila on a long inspection trip, appeared in the public press under such headlines as the following:

"The Municipal Board is entirely sustained.—Attorney-General renders decision against the Secretary of the Interior and Director of Health.—City can not improve low areas and unsanitary ground of private owners at public expense."

It was furthermore promptly made use of by the Municipal Board in throwing responsibility for the continuance of the existence of low-lying and unsanitary premises upon the Director of Health, for in a letter dated January 4, 1909, the secretary of the Municipal Board advanced the following extraordinary contention:

"That by sections 809 (h) and 813 above cited, which were drafted and proposed by the Bureau of Health, approved by the honorable the Secretary of the Interior and passed by the Board in accordance with Act 1150, the power and duty of enforcing the filling in of low lying insanitary premises is placed upon the Bureau of Health."

In point of fact the sections referred to are not designed to have anything to do with the filling in of lowlands, which subject is fully covered by sections 790, 791, 792, and 793, and the Municipal Board, in authorizing the making of such a statement, *acted as if it were in ignorance of its own ordinances, which expressly impose this obligation upon the city engineer.*

THE FAILURE OF THE ATTORNEY-GENERAL TO CONSIDER CERTAIN PROVISIONS OF LAW IN RENDERING HIS OPINION.

Upon reading the opinion of the Attorney-General I was amazed to find that it omitted all mention of the existing provisions of law which bear directly upon the subject under consideration, namely, the filling and draining of lowlands; that it expressly made the extraordinary statement that the power to require lot owners to drain and fill up their lots at their own expense had not been conferred upon the city of Manila, and that in outlining a procedure which might be followed in dealing with insanitary conditions in low and undrained lands, it cited only certain provisions of law which *by indirection* might be made applicable.

An occurrence of this sort admits of but two explanations. Either the person who prepared the opinion was ignorant of the law or he chose to

ignore it. Adopting the former of these explanations as the true one, I addressed to the Attorney-General the following letter:

"FEBRUARY 9, 1909.

"The Honorable,

the ATTORNEY-GENERAL, *Manila*.

"SIR: I note that at the request of the Auditor you have rendered an opinion under date of December 24, 1908, in response to a request from the Acting Auditor for information as to whether the private owners of certain real estate in the city of Manila, which is in a highly unsanitary condition, can be compelled to make the necessary improvement at their own expense.

"This opinion appears to have been requested by the Auditor for the reason that the Municipal Board had requested his approval of the use of unexpended moneys in the cholera emergency fund for improving the sanitary conditions of this real estate.

"You find that the power to require any land or building, which is in an unsanitary condition, to be cleansed at the expense of the owner or tenant, and upon failure to comply with such an order have the work done and assess the expense upon the land or building, is explicitly conferred upon municipalities organized under Act 82, by paragraph (n) of section 39 of said Act, but that upon examining the Charter of the city of Manila as amended it appears that no such power is therein given to said city and have therefore advised the Auditor that the city of Manila has not the power to do this work at the expense of the owners of the property.

"You have expressed the further opinion that the desired result may be obtained in another way, namely, by having the Director of Health declare the property in question to be a nuisance and require that it be abated. In the event that property owners neglect or fail to comply with such orders of the Director of Health, you invite attention to the fact that they may be prosecuted and that as the nuisance is a continuing one they may be *repeatedly* prosecuted and fined or imprisoned, or both, until they have complied with the orders of the Bureau of Health in the premises.

"As a matter of fact the method of reaching these cases suggested by you is one that has long been followed by the Director of Health in dealing with them and it certainly affords one way out of the difficulty.

"Your opinion has, however, been understood to apply, and has been quoted in the public press as if it did apply, to the specific unsanitary conditions arising in low and poorly drained lands. In point of fact this particular question is one of the two important questions relative to the avoiding and remedying of unsanitary conditions which are now pending between the Bureau of Health and the Municipal Board and I understand that the ruling requested of the Auditor was in connection with contemplated improvements on such lands.

"Inviting your attention particularly to the provisions of paragraph (s) of section 3 of Act 1150, and to section 793 of the Revised Ordinances of the City of Manila passed by the Municipal Board in accordance with the provisions of said paragraph, I inquire what officer should, in accordance with said provisions of law, call upon and require the owner of any such premises to make the same sanitary by filling, draining, etc.?

"Your opinion is also requested as to whether under authority of the proviso of said section the city engineer is authorized himself, or through his agents, to remedy such unsanitary conditions and, in the event that he is, who should pay for the work?

"In this connection attention is invited to the closing provisions of paragraph (a) of section 12 of Act 1150, and your opinion is requested as to the bearing of this provision upon the general question of who should do the work of the sort referred to in said paragraph and who should pay for it, in view of the fact that the law requires the plans and estimates of the cost of such sanitary work to be submitted to the Municipal Board.

"Very respectfully,

DEAN C. WORCESTER,

"Secretary of the Interior."

This letter was sent forward with a rush card. Some time having elapsed without any response, I took the matter up with the Honorable, the Secretary of Finance and Justice, asking him to expedite the rendering of the opinion as much as possible. This he very kindly promised to do, but a considerable further period elapsed without any result and I took the liberty of bringing the matter to his attention a second time.

He once more promised to take it up. After further delay I finally requested my secretary to see if he could secure action. He called at the Attorney-General's office once and telephoned that office three times at considerable intervals and was repeatedly assured that the opinion would be rendered shortly, but it did not come.

Finally, on April 1, having waited in vain for *fifty* days for an opinion on a subject on which the Acting Auditor had been able to secure an opinion in *seven* days and with which the Attorney-General was presumably familiar, as he had already given attention it, I addressed a letter to the Governor-General calling his attention to my efforts to secure an opinion in this matter and to their complete failure; and stating that I would, under the circumstances, venture to express my own opinion in the premises.

OPINION OF THE SECRETARY OF THE INTERIOR AS TO THE LAW RELATIVE
TO THE CLEANSING, DRAINING OR FILLING OF LOWLANDS.

This appendix has been completed, except for the opinion of the Attorney-General, for many weeks, and I do not feel justified in longer delaying its publication. Pursuant to my promise to the Governor-General I venture to include, at this point, an expression of my own opinion relative to the law as to the cleansing, draining or filling of lowlands. I do this with the less hesitation because the law on this subject is so explicit that it would really suffice to quote it. There is little room for difference of opinion as to its provisions.¹

Paragraph (s) of section 3 of Act 1150 reads as follows:

"SEC. 3. The ordinances drafted by the Board of Health may provide for:

* * * * *

"(s) *Cleansing, draining or filling of lowlands where such lands are in an unsanitary condition and in the opinion of the Board of Health constitute a serious*

¹ For the Attorney-General's opinion, finally rendered on April 3 in response to my letter of February 9; for his explanation of his extraordinary delay, and for further comments by me, see the Addendum at the close of this report.

menace to public health: Provided, That no order for the cleansing, draining or filling in of such lands involving a cost of more than three hundred pesos, Philippine currency, shall be effective without the approval of the Secretary of the Interior, who may request from the sanitary engineer of the Philippine Islands a report as to the cost of cleansing, draining, or filling in any such piece of lowland, and the sanitary engineer shall make such report when so requested."

It should be noted that by subsequent legislation the powers conferred by Act No. 1150 upon the Board of Health were transferred to the *Director of Health*. Pursuant thereto the Director of Health prepared and submitted certain ordinances on this subject which were duly passed by the Municipal Board. They constitute sections 790, 791, 792 and 793 of the Revised Ordinances of the City of Manila and taken collectively make up chapter 80, entitled "The Filling of Lowlands."

Section 793 reads as follows:

"SEC. 793. *City engineer may abate nuisances.*—Where any premises within the limits of the city are composed of lowlands, or are so excavated or walled, diked, or dammed as to admit or cause the formation on the surface thereof of stagnant or foul waters which are a nuisance and a menace to the public health, *the city engineer may call upon and require*, subject to the limitations of subsection (s) of section three of Act Numbered Eleven hundred and fifty of the Philippine Commission, the owner of any premises whereon such pools may exist to fill up the same with good clean earth or other approved material to the level of the surrounding ground, or to drain such pools by means of surface drains into any channel with which such surface drains may lawfully communicate, or to cut or breach any retaining walls, dike, or dam so that such retained water may have free escape: *Provided, That whenever the Director of Health shall declare that any lowland, marsh, or stagnant pool or pond in the city of Manila is in an unsanitary condition and constitutes a serious menace to the public health, the city engineer shall take steps to cause the said lowlands, marshes, stagnant pools, or ponds to be cleaned, drained, or filled in and the unsanitary conditions removed."*

In other words, the Municipal Board, acting under due authority of law conferred by the same legislative body which passed the act to incorporate the city of Manila commonly known as the Manila Charter, passed an ordinance providing that, subject to the limitations of subsection (s) of section 3 of Act No. 1150, which are—

"that no order for the cleansing, draining, or filling in of such lands involving a cost of more than three hundred pesos, Philippine currency, shall be effective without the approval of the Secretary of the Interior"

the city engineer may call upon and require the owner of any premises whereon pools may exist to fill up the same with good clean earth or other approved material, to the level of the surrounding ground, or to drain such pools by means of surface drains into any channel with which such surface drains may lawfully connect, or to cut or breach any retaining walls, dike or dam so that such retained water may have free escape; and providing further, that whenever the Director of Health shall declare that any lowland, marsh, stagnant pool or pond in the city of Manila is in an unsanitary condition and constitutes a serious menace to the public

health, the city engineer *shall* take steps to cause said lowlands, marshes, stagnant pools or ponds to be drained or filled in and the unsanitary conditions removed.

These provisions of law clearly contemplate that action to cause the remedying of the unsanitary conditions above enumerated will be taken by the city engineer AND BY HIM ALONE. The Director of Health is given no status in the matter except that he may declare that any lowland, marsh, stagnant pool or pond in the city of Manila is in an unsanitary condition and constitutes a serious menace to the public health, THEREBY IMPOSING UPON THE CITY ENGINEER LEGAL OBLIGATION TO CAUSE THE REMOVAL OF THE UNSANITARY CONDITIONS. In other words, we have here a consistent carrying out of the policy long since decided upon relative to sanitary work in the city of Manila, namely, that the Director of Health should decide what was to be done and that the city should do it.

CRITICISM OF THE ATTORNEY-GENERAL'S OPINION OF DECEMBER 24, 1908.

Referring now to the opinion of the Attorney-General dated December 24, 1908, that official found that lot owners may be constitutionally required to drain and fill up their lots at their own expense and that the power may be delegated to municipal authorities, but that in order that they may exercise this authority it must be clearly and unquestionably conferred. He states that said power is clearly conferred upon municipalities organized under Act No. 82, by section 39 (*n*) of said Act, but upon examining the Charter of Manila as amended finds that no such power is given to said city and therefore concludes that the city of Manila has no power to do this work at the expense of the owners of the property.

In rendering this opinion he overlooked or ignored the fact that paragraph (*s*) of Act No. 1150, which, among other things, provides for the drafting of sanitary ordinances by the Board of Health and for their subsequent enactment by the Municipal Board of the city of Manila, explicitly provided for the drafting of ordinances for the cleansing, draining or filling in of lowlands; as well as the further fact that such ordinances had been drafted by the Director of Health, to whom the powers and duties of the former Board of Health had meanwhile been transferred, had been duly passed by the Municipal Board and THAT SUCH ORDINANCES EXPLICITLY PROVIDE THAT THE CITY ENGINEER MAY, SUBJECT TO CERTAIN LIMITATIONS, CALL UPON AND REQUIRE THE OWNERS OF LOWLANDS TO FILL THEM OR DRAIN THEM; AND THAT WHENEVER THE DIRECTOR OF HEALTH SHALL DECLARE THAT SUCH LOWLANDS CONSTITUTE A SERIOUS MENACE TO THE PUBLIC HEALTH THE CITY ENGINEER *shall* TAKE STEPS TO CAUSE THEM TO BE CLEANED, DRAINED OR FILLED IN.

It therefore seems to me that further consideration need not be given to the opinion of the Attorney-General that the power of compelling lot owners to drain and fill in their lots has not been delegated to the

municipal authorities and that the city of Manila has not the power to do this work at the expense of the owners of the property.

The Attorney-General recognized as lawful the provisions of Act No. 1150 making the Bureau of Health the local Board of Health for the city of Manila and giving it power to draft, for enactment by the Municipal Board, health ordinances for said city. And although he failed to see the provisions of paragraph (s) of section 3 of said Act *he did not fail to note the provisions of paragraph (r) of the same section of the same Act* which empowers the Board to provide, in the ordinances so drafted by them, for the "definition, declaration and prohibition of nuisances dangerous to the public health."

The Attorney-General further found that the Bureau of Health had actually done this and that any accumulation or deposit of stagnant water, sullage water, manure, house refuse, or other matter, wherever situated, which is unhealthful or obnoxious had, by ordinance, been declared to be a nuisance, and that it is further provided by ordinance that—

"No owner or occupant or other person in charge of any lot, tenement house, premises or building, or other place whatsoever, shall allow or permit any nuisance to exist in such lot, tenement house, premises, building or other place"—

and that under provisions of law mentioned by him, the Director of Health or any health officer, duly appointed by him, may make complaint against persons violating health ordinances and may bring about their conviction and punishment. The Attorney-General further expresses the opinion that it is within the power, and is clearly the duty, of the Director of Health to notify the owners of the property in question of the maintenance by them of the said nuisances thereon, requiring that they shall, within a time and in a manner specified within the notice, abate the same, and he calls attention to the fact that should property owners neglect or fail so to do they are then subject to prosecution and that if the nuisance is a continuing one they may be continually prosecuted and imprisoned or fined, or both, until they shall have complied with the orders of the Bureau of Health in the premises.

In other words the Attorney-General finds that the Director of Health, having power to act under these conditions, ought to do so. Certainly no one can dissent from this conclusion and the last person who would desire to do so would be the Director of Health.

THE DIRECTOR OF HEALTH IN ABATING NUISANCES HAS LONG FOLLOWED
THE PROCEDURE SUGGESTED BY THE ATTORNEY-GENERAL.

There is absolutely nothing new in this conclusion of the Attorney-General and the method therein suggested by him has been pursued, not only in dealing with nuisances dangerous to the public health in general but in remedying nuisances due to imperfect drainage or lack of filling. This course has been followed not for the reason that it was the one

contemplated by law, for, as I have shown, it is not, but for the reason that experience had demonstrated the inertia of the City Engineer's office to be such that it was practically hopeless to look there for remedial action, and the Director of Health had been forced to follow the procedure outlined by the Attorney-General for the reason that in this way only could he get results.

THE DUTY OF THE CITY ENGINEER.

Considering the provisions of law overlooked or ignored by the Attorney-General in rendering his opinion we are forced to the further conclusion that the city engineer who *may*, under certain conditions, require the owners of lowland to fill or drain it, *also ought* to do so; this apart from the fact that when such lowlands are declared by the Director of Health to constitute a serious menace to the public health the duty of taking steps to cause them to be cleaned, drained or filled is imposed by law upon the city engineer.

THE GOVERNOR-GENERAL CALLS CERTAIN FACTS TO THE ATTENTION OF THE MUNICIPAL BOARD.

In this connection attention is invited to the following indorsement placed by the Governor-General upon a letter from Mr. P. G. McDonald of the Municipal Board, which, with its inclosures, was apparently designed to show that the unsanitary condition of the district known as Bilibid Viejo had repeatedly been reported to the Bureau of Health and that that Bureau was to blame for its not having been put into sanitary condition:

"[Sixth indorsement.]

"EXECUTIVE BUREAU,
"Manila, January 25, 1909.

"Respectfully returned to the Municipal Board, Manila, calling attention to the fourth indorsement, to a letter of the Acting Director of Health dated November 18, 1908, and memorandum of the sanitary engineer. *It is impossible to drain some of these districts unless streets are put through. How can a property owner be compelled to drain his property if his drains are to pass over the private property of his neighbors? The putting through of streets, it seems to me, is an absolute prerequisite to the forcing of the majority of property owners to drain their property. We can not force the property owner to an outlay which virtually means a confiscation of his property interests.*

"JAMES F. SMITH, Governor-General."

A LIMITATION ON THE POWER OF THE SECRETARY OF THE INTERIOR TO APPROVE ORDERS FOR THE FILLING OR DRAINAGE OF LOWLANDS.

In this indorsement the Governor-General calls attention to two points of vital importance. The first is that the exercise of the power conferred upon the city engineer to compel owners to abate this class of nuisance must prove abortive unless the city constructs the necessary streets with their accompanying drains or at least provides some general drainage system.

The second is that there is a sharp limitation imposed on the power conferred on the Secretary of the Interior to approve orders for the cleansing, drainage or filling in of lowlands by section 3 (s) of Act No. 1150.

While to an uninformed person such power might seem to be absolute the courts of the United States have held over and over again that it is not, and can not be, absolute, but that in exercising it the approving authority must take into consideration the value of the land and the cost of the filling or drainage needed to put it into a sanitary condition, and that where such cost would bear an improper proportion to the value of the land so that it would be unreasonable to expect the owner to do the necessary filling or draining to put it into sanitary condition, and that compelling him to do so would in effect result in confiscating his property, an order compelling him to fill or drain it can not be enforced. This point has been so fully established that it admits of no discussion, and the Secretary of the Interior in passing upon orders to property owners to fill lowlands has always borne it clearly in mind.

GENERAL DRAINAGE SYSTEMS MUST BE PROVIDED BY THE CITY.

It must be clearly remembered that the provisions of law on which the Attorney-General based his opinion deal with the sanitation of lots, and not with the much larger question of establishing general drainage systems, which must of necessity be installed and maintained by the city authorities, and without which many low-lying lots can not be made sanitary.

If the property of a private owner abuts upon a river, estero or other natural outlet he may, under the provisions of chapter 80 of the Revised Ordinances, be required to drain his premises into such river, estero or outlet, but if his premises are not so situated and if, on the contrary, his land is surrounded on three sides by the land of other private persons and upon the fourth side abuts upon a public street which has no drainage facilities he is then absolutely helpless so far as concerns his own efforts, for in order to get rid of the drainage from his property he may not enter upon the property of his neighbors nor may he construct a drain in the street.

Under such circumstances the digging of ditches on his property would simply make additional places of retention for foul water for which there would be no outlet, while the filling of his property sufficiently to raise it above that of his neighbors might involve a cost which would be absolutely prohibitive, and if not, the net result might well be that the property of his neighbors would then become low-lying as compared with his and would receive and retain the water that ran off his lot, so that the general sanitary conditions would remain unimproved. Still worse is the predicament of the man whose property is surrounded on four

sides by the property of other individuals. There is absolutely nothing which he can do to get rid of his drainage. It is idle to expect that these difficulties will, or can, be overcome through the coöperation of private owners. Not only do such owners lack the necessary initiative and experience to make it possible for them to establish general drainage systems but they usually lack inclination to do it as well.

A man who owns a dry and sanitary piece of land will, as a rule, vigorously resent the running through it of a ditch for the discharge of offensive waste from his neighbor's property. Even when the Bureau of Health, in dealing with great emergencies such as those presented by cholera epidemics, has attempted to cross private property with drainage ditches, the owners of such property have frequently entered strong protests and such protests have necessarily been sustained not only by the Secretary of the Interior but by the Governor-General. Where then *do we find authority for the construction of general drainage systems for the disposition of sewage and surface water?* Such authority is vested in the city government *which also has the power to condemn land through the exercise of the right of eminent domain, without which the establishing of such systems would be impossible.*

It is the usual practice to combine the general drainage system of a city with its general street system to the end that economy may be secured through the utilization, for both street and drainage purposes, of such land as it may be necessary to condemn. *But there is nothing to prevent a city from condemning land for drainage purposes in regions where it is not as yet prepared to construct streets.* The streets should, of course, follow as soon as possible.

THE STREETS NECESSARY FOR THE SANITATION OF THICKLY SETTLED DISTRICTS MUST BE BUILT BY THE CITY.

The only system for the disposition of excreta which will be available for years to come in many of the unsanitary outlying districts of Manila is the pail system. Garbage, too, must be carted away, and this can not be done unless there are streets along which carts may be driven.

DUTIES OF THE CITY RELATIVE TO THE COLLECTION AND DISPOSAL OF EXCRETA, GARBAGE AND REFUSE.

The city of Manila has further obligations in the matter of improving sanitary conditions. Section 7 of Act No. 1150 reads:

"SEC. 7. *Should the Board of Health find that excreta, garbage, refuse, the contents of closets, vaults, cesspools, or any other unhealthful or dangerous substance is being collected, disposed of, or allowed to accumulate by the city authorities in such manner as to endanger the public health, it shall make complaint through the Secretary of the Interior to the Municipal Board, and should the Municipal Board fail to take seasonable and suitable measures to remedy the evil, the Board of Health shall make complaint through the*

Secretary of the Interior to the Civil Governor, who shall issue to the Municipal Board such instructions as he may deem necessary in the interest of public health."

While private owners may be expected, and compelled, to place the excreta, garbage, refuse, etc., from their premises in the proper receptacles and at proper places for collection, *it is entirely clear from this section that the work of collecting and disposing of such matter is to be performed by the city authorities, and that such authorities are not to allow it to accumulate in such a manner as to endanger the public health.*

COMPLAINTS AGAINST THE MUNICIPAL BOARD AND THE CITY ENGINEER.

I will now briefly summarize the complaints made by the Secretary of the Interior and by the Director of Health against the Municipal Board of Manila and the city engineer, as well as the replies of the latter to such complaints so far as I am familiar with them.

First. In certain unsanitary districts of Manila the municipal authorities have persistently neglected or refused to make adequate provision for the collection and disposal of excreta, garbage, refuse, etc., by the installation of necessary public closets and the construction of necessary streets. *In reply the city makes the plea that it may not lawfully improve the property of private owners.*

While it is doubtless true that the city may not *enter* upon the property of private owners and improve it for the sole benefit of such owners, it most certainly *may take* private property for its own necessary use in the performance of the duties imposed upon it by law, and that is precisely what we ask it to do.

In regions where general street and drainage systems have not been installed the best effort of private owners to make their premises sanitary must be in a large degree fruitless. The reasons why neither the Bureau of Health nor private owners can install general street and drainage systems are so obvious that I should insult the intelligence of the public were I again to enumerate them. If these improvements, so absolutely essential to the proper sanitation of the city of Manila, are not made by the city authorities they can not and will not be made at all.

Second. The office of the city engineer, which alone is empowered to see to it that building ordinances are complied with has, in a most lamentable manner, failed properly to discharge its duties. It has not prevented the repair of numerous old nipa buildings, or the erection of many new ones within prohibited districts. In many cases it has failed to enforce those provisions of the building ordinances which are especially designed to insure against the unsanitary conditions directly due to lack of light and ventilation. In one instance it has even *repealed* such a provision without consulting the health authorities. In very numerous cases it has, in effect, encouraged the evasion of such provisions by writing

upon the faces of building permits such statements as "Not to be used for human habitation" *with the certain knowledge that the structures in question would be used for human habitation immediately upon their completion if not before*, and when called to task has endeavored to shift responsibility to the Director of Health by claiming that if he considers the premises unsanitary he had power to require them to be vacated! While this is true, it is also true that it is very bad policy for one branch of the government to authorize the erection of a new structure of a certain kind and for another branch of the same government promptly to prohibit its use for the purposes for which it was obviously intended.

Third. The worst result of the maladministration of the city engineer's office is that we get no general improvement in the sanitary condition of the city. The Director of Health may order persons out of unsanitary buildings, and he very frequently does so. What happens then? They flock into *other* unsanitary buildings and add the evils of overcrowding to those which previously existed. This condition will necessarily continue until the provisions of the building ordinances are enforced so that all new buildings constructed are necessarily sanitary. We shall then get suitable structures into which persons driven out of unhealthful ones may go.

The practical working of the present arrangement is as follows:

The Director of Health discovers a lot of unsanitary nipa shacks, *perhaps on the very ground that he ordered cleared a year or two before*. He asks the city engineer why the erection of these buildings has been allowed and the latter replies (as he has done over his own signature) that he is very sorry but that the force of his office is too small to attend to such matters. He adds that if the Director of Health does not consider these building sanitary he should order their occupants out. This the Director of Health does. There ensue the usual delays, petitions to the Governor-General and perhaps extensions of time by the municipal court. Ultimately the unfortunate occupants are ejected. They then take refuge in the houses of "*parientes*" or friends, and watching their opportunity, put up new nipa shacks elsewhere, only too frequently within the hard material zone. They are again discovered by the Director of Health and reported to the city engineer who once more is very sorry and *politely inquires why the Director of Health does not compel them to move out if he deems the buildings unsanitary!* So the merry round goes on, with the net result that the Director of Health and the Municipal court waste their time; that the poorer classes are constantly molested, and that no material improvement in the sanitary condition of Manila is brought about. What is the remedy for this condition? In my opinion there is but one and it is very simple. *The power at present vested in the office of the city engineer relative to the enforcement of those provisions of the building ordinances which have to do with sanitation should be taken from that office and vested in the Director of Health who would*

then not only have authority to cause unsanitary buildings to be vacated BUT WOULD BE EMPOWERED TO INSIST ON SANITARY CONSTRUCTION IN NEW BUILDINGS.

It is idle for the city engineer to disclaim responsibility for the erection of nipa shacks within the hard-material zone and for the evasions of the sanitary provisions of the building ordinances on the ground of the insufficiency of his force unless he can show that he has earnestly sought to secure authorization for the appointment of an adequate force.

I most earnestly urge upon the Commission the necessity of doing away, once for all, with the present delay and inaction in connection with the matters just discussed, by vesting all power relative thereto in the office of the Director of Health.

Fourth. In the case of the San Lazaro Estate, where certain streets had existed and have been used by the public for years, and where the necessary land for others has been cleared and offered to the city, the city has persistently refused to construct the necessary streets and drains to render possible the establishment of decent sanitary conditions on the absurd ground that the streets of this estate, which is in fact a trust administered by the Insular Government for the benefit of the public, should not be improved by the city since the city may not improve private property, and this estate, being the property of the Insular Government, is in effect private property; and is indeed even less entitled to improvement than ordinary private property for the reason that the government does not pay taxes on it!

Leaving out of consideration the fact that it is not customary for governments to pay taxes on their own property to the municipalities in which it happens to be situated, and the further fact that the income derived from this particular property is largely expended in caring for the insane, the lepers and the victims of other dangerous communicable diseases among the inhabitants of the city of Manila, attention is invited to the opinion of the former Attorney-General, Sr. Gregorio Araneta, which is set forth in full on pages 88 and 89 of the report to which this appendix is now added. The Attorney-General makes, among others, the following statements:

"The streets now existing through the San Lazaro Estate are public streets belonging, as such, to the city of Manila.

* * * * *

"It is, undoubtedly, the duty of the city of Manila to maintain and keep in repair any and all public streets within the limits of the city. *The fact that a street is bordered by lands exempt from taxation does not change the status of the street or modify the liability of the city in regard to the repair of the same.*

"The fact that the San Lazaro Estate is exempt from taxation and is administered by the Insular Government in no way affects the character of the public streets that pass through such estate. These streets belong to the city. They were opened and dedicated to the use of the general public of the city of Manila, and their use is not confined to the residents and tenants of the San Lazaro Estate.

The general public uses the streets and have the right, as citizens of the city of Manila, to demand that the streets be kept in a reasonable state of repair. A public street, even though laid out in a particular locality within the city limits, appertains to and is subject to the use of the general public of the city of Manila; and it can not be said that the status or condition of a particular public street is fixed by the condition of the adjacent property.

"I am, therefore, of the opinion that it is the duty of the city of Manila to maintain and keep in repair the public streets within the limits of the city of Manila, including those public streets which pass through the San Lazaro Estate, and that no distinction can or should be made because of the condition of adjacent property."

It might be anticipated that this opinion would have settled the matter; but did it? Not at all. It was rendered in response to an indorsement dated August 24, 1907. On October 12, 1907, nothing having meanwhile been done by the city, the matter was taken up by the Director of Lands in a communication which was forwarded to the Municipal Board on October 17, 1907, with the following indorsement:

"Respectfully referred to the Municipal Board with the request that a conference be had with the Director of Lands and arrangements made to carry out the proposed improvement of the San Lazaro Estate with the least practicable delay."

"JAMES F. SMITH, Governor-General."

On February 6, 1908, the city engineer, W. P. Wylie, in returning the papers to the Municipal Board, stated:

"The chief of the department of sanitation and transportation informs me that at the present time he can not undertake to carry out the wishes of the Director of Lands. Estimate will shortly be presented by this department, to the Board, for certain work in the street areas in connection with the proposed expenditure of funds raised by the extra peso cedula tax."

Under date of February 8, 1908, the papers were returned to the Governor-General with this statement:

"The street areas within this zone will receive attention in the near future."

This was cheering, but unfortunately the street areas DID NOT receive the promised attention and when cholera reappeared in 1908 much of this estate was in an indescribable condition of filth as a result of the absence of public closets, the impossibility of moving garbage carts over, or rather through, the series of bogs and sinkholes which took the place of streets, and the complete absence of any general drainage system with which the drains of private occupants might connect. The efforts at providing drainage which they had made necessarily resulted in the formation of unspeakably filthy deposits upon the borders of their several holdings.

When members of the Municipal Board were taken by me to view these conditions they renewed their old plea that the estate was Government property and *that for the purposes of the city it must be considered private property which they were not at liberty to improve.* Upon

my inquiry if they disputed the correctness of the Attorney-General's opinion and defied the Governor-General's order, they replied to my utter amazement *that they had never seen the opinion of the Attorney-General which, in point of fact, had been promptly forwarded to them when it was rendered!*

I thereupon furnished them a copy of it, and the Governor-General having approved the expenditure of five thousand pesos for the purpose, there was constructed an experimental system of open drains connecting with a neighboring estero. The Director of Lands immediately made available ₱5,000 for draining the lots in the area covered by this system, with the result that it was promptly brought into decent sanitary condition. I believed the matter at last settled. But upon my return from a long inspection trip through the provinces what was my surprise to find upon my desk the following letter which had been transmitted for my information.

In writing this letter the Governor-General makes no mention of the fact that he himself, under date of October 17, 1907, had *requested* that arrangement be made to carry out the proposed improvements on the San Lazaro Estate with the least practicable delay and that his request had been absolutely ignored for more than one year!

MANILA, December 23, 1908.

GENTLEMEN: I have the honor to acknowledge the receipt of your indorsement of December 17 on Executive Bureau file 74400-A31, Municipal Board file 9322-A1, in which it is stated, with reference to the improvement of the San Lazaro Estate:

"In this regard it respectfully adheres to its opinion frequently expressed that lands of the San Lazaro Estate are in the same relation to the city government with regard to improvement as those of a private owner."

It has long since been decided that the position taken by the Municipal Board is untenable. The San Lazaro Estate is a trust administered by the Government for the benefit of the lepers, who would otherwise be a public charge. Moreover, there is not a private property owner in the city of Manila for whom the city has not done work in improving streets, by curbing, putting in water service, sewer connections, etc., irrespective of whether the property paid taxes or not. The city is buying land for streets and then improving them at its own expense. Why not accept the gift of streets and improve them in the same manner? *This matter has been settled by an opinion of the Attorney-General and must be considered a closed incident. The stubbornness of the Municipal Board in refusing to follow the opinion of the Attorney-General long since delivered to them, has brought upon them criticism which they might very well have escaped, had they followed that opinion.*

The Executive recognizes that the Municipal Board has accomplished great work in the improvement of the city of Manila and that its sanitary condition is immeasurably better now than it was at the time the Municipal Board took control. The Board has built new streets, greatly improved the old ones, filled in large areas of city lands, made attractive the breathing places of the city, installed a new water system, and is about to finish a new sewer system. All these things are to the credit of the Board.

It is not, I think, to the credit of the Board, however, to stand out stubbornly against opening up the district of San Lazaro. The streets have been dedicated

to the city so far as it is possible for the Insular Government to dedicate them. The land for these streets has not cost the municipality one dollar, and the failure of the city to improve them or to install proper drainage has brought upon the Insular Government and the Municipal Government a burden of expense which it is not pleasant to contemplate. To save ₱10,000 or ₱20,000 in drainage the Municipal and Insular Governments have been put to an expense of nearly ₱500,000.

The adding of a new suburb to the city of Manila is of advantage to the city and the failure of the Municipal Board to recognize that fact indicates either that it has not considered the advantage of extending residential areas, or that it has no sense of proportion. The Executive is compelled to speak plainly on this subject and it is hoped that the dissensions between the city of Manila and the Bureau of Health will cease and that both of these branches of the Government will set aside their private differences and work together harmoniously for the public good.

Very respectfully,

JAMES F. SMITH,
Governor-General.

To the MUNICIPAL BOARD, *Manila, P. I.*

The Governor-General's rebuke to the Municipal Board was administered on December 23, 1908, but even this was not enough. Beginning with February 10, 1909, there ensued the following correspondence:

DEPARTMENT OF THE INTERIOR, BUREAU OF LANDS,
Manila, February 10, 1909.

The MUNICIPAL BOARD OF THE CITY OF MANILA.

(Through The Director of Health, Manila.)

GENTLEMEN: Complaints are continually being received by me regarding the condition of Calle Timbugan, which passes through the San Lazaro Estate. These complaints arise from the fact that this street is, during the season of high tide, under water at least once and sometimes twice daily. The raising of the grade of this street at least to the level of the surrounding territory would appear to be a reasonable request of these residents, and it would seem that a slight fill along this street could be made without a very large expense.

I am referring this request through the Director of Health in order that he may be advised thereof, as undoubtedly a street which is under water once a day through different seasons of the year can hardly be called sanitary, and I therefore request that, if possible, the Board take such action as will improve this street at as early a date as possible.

Very respectfully,

C. H. SLEEPER, *Director of Lands.*

[First indorsement.]

BUREAU OF HEALTH,
Manila, P. I., February 17, 1909.

Respectfully forwarded to the Municipal Board through the honorable the Secretary of the Interior.

As the condition of the streets of San Lazaro has repeatedly been brought to the attention of the Board both by this Bureau as well as the Bureau of Lands the undersigned can merely forward this communication reiterating previous requests and recommendations.

Special attention may be invited to Calle Timbugan where a drainage ditch laid on the correct street line has obstructed a provisional existing roadway and thrown the present roadway out on to the soft ground on the side. Calle O'Donnell

is low and in need of metalling. Calle Felix Huertas between Lope de Vega and Zurbaran has also been moved, by the extension of fences to correct street lines, out on to soft ground. Calles San Lazaro and Malabon are in wretched condition. However, all streets it may be mentioned should be improved.

VICTOR G. HEISER, *Director of Health.*

[Second indorsement.]

DEPARTMENT OF THE INTERIOR,
Manila, P. I., February 27, 1909.

Respectfully forwarded to the Hon. James F. Smith, Governor-General, inviting attention to the fact that the assurance given by the Municipal Board on February 8, 1908, has never been realized and that it is urgently necessary that something should be done for the improvement of these streets.

DEAN C. WORCESTER,
Secretary of the Interior.

[Third indorsement.]

EXECUTIVE BUREAU,
Manila, March 8, 1909.

Respectfully referred to the Municipal Board, Manila, requesting an explanation of the delay and failure to take action on this matter. Prompt return of these papers is desired.

JAMES F. SMITH, *Governor-General.*

[Fourth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,
March 9, 1909.

Respectfully referred to city engineer, inviting attention to preceding indorsement.

By direction of the Board:

H. L. FISCHER, *Secretary.*

[Fifth indorsement.]

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,
OFFICE OF CITY ENGINEER,
Manila, March 12, 1909.

Respectfully returned to the secretary of the Municipal Board, inviting attention to the following facts relative to the streets in San Lazaro district.

The Board has never yet authorized the expenditure of funds allotted to this department for construction of streets in the San Lazaro district, though ₱65,013.37 has been spent in maintenance and repairs, and the work recently authorized for the laying of a water main will amount to the construction of a roadway in a portion of Calle Timbugan.

In August, 1907 (see Mun. Bd. file 7982), the Board stated its position in a letter to the honorable the Secretary of Finance and Justice, in the following terms:

" * * in view of the fact that no land tax is collected in the estate, it does not feel justified in expending taxes collected in other parts of the city to repair and drain the streets in the estate."*

Lengthy correspondence ensued, including the opinion of the then Attorney-General to the effect that it is the duty of the city of Manila to maintain and keep in repair the public streets which pass through the San Lazaro Estate, and that no distinction can or should be made because of the condition of adjacent property. The city engineer was called upon to furnish an estimate of the cost

of constructing all the streets in the estate, and two estimates were prepared, one to cover the full width of every street in the district; the other to construct 6-meter roadways throughout the district, with gutters on two streets only. The correspondence ended on February 8, 1908, when the papers were returned to the Governor-General by the Municipal Board "inviting attention to the preceding indorsement, which shows the expense of the requested improvements to be so great that the city can not possibly undertake them. The street areas within this zone will receive attention in the near future."

At the time of the discussion by the Board of the estimates for the current fiscal year, in May and June, 1908, the question was taken up in connection with public works, but no appropriation was made for the purpose, and the appropriations as approved by the honorable, the Governor-General, made no provision for this work.

Under these circumstances I can not see that the city engineer has any authority to expend public funds in the construction of the streets in the San Lazaro district, but only for maintenance of the streets already constructed.

I respectfully invite attention to Municipal Board files 6694, 7982, 8246, 9560, and 8756.

On March 18, 1908, the undersigned was directed to confer with the residents of Calle Timbugan with a view to ascertaining to what extent they would assist the city in improving the condition of that street. I held more than one interview with Mr. Guevara, who represented the petitioners for improvements; but Mr. Guevara finally admitted that they could not assist to the extent of more than a few pesos, if at all. As the cost of the improvements requested by them ran into the thousands of pesos, the matter was dropped.

W. P. WYLIE, *City Engineer.*

[Sixth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,

March 15, 1909.

Respectfully returned to His Excellency the Governor-General, inviting attention to the fifth indorsement.

The city's assurance of February 8, 1908, has been fulfilled to the best of its ability in the allotment of street expenses, by giving attention to San Lazaro street areas to the extent of approximately ₱6,500 during the present fiscal year, in ditching. If the city is to undertake the improvement of the San Lazaro Estate, almost all of the funds available in any one year for street work throughout the entire city would have to be expended in this district.

By direction of the Board:

H. L. FISCHER, *Secretary.*

[Seventh indorsement.]

EXECUTIVE BUREAU,

Manila, March 18, 1909.

Respectfully returned to the Municipal Board, Manila. I have talked so much about this sanitary proposition and about the necessity of expending money to secure sanitation, and have pointed out so frequently that the opening of streets is of the very first necessity in securing sanitation, that I have become tired of harping on the subject. I shall make an inspection of San Lazaro Monday morning next at 9.30, in company with the Director of Health. The Municipal Board, if it chooses, may send a representative to be present during the inspection. I desire to say that if I find San Lazaro in an unsanitary condition or that no attention has been paid to counsels heretofore given as to street improvements which should be made, I shall feel myself justified in coming to the conclusion that the

purpose of the Municipal Board is to obstruct sanitary work and to bring to naught all efforts on the part of the Bureau of Health to better health conditions in one of the three unhealthy districts in the city of Manila.

JAMES F. SMITH, *Governor-General.*

[Eighth Indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,

March 24, 1909.

Respectfully returned to His Excellency the Governor-General.

The Board believes that after the inspection made on March 22, the Governor-General is satisfied that the city is proceeding with the improvement of the streets of the San Lazaro Estate; and assurance is hereby given that such work will be continued as the resources of the city permit.

By direction of the Board:

H. L. FISCHER, *Secretary.*

[Ninth Indorsement.]

OFFICE OF THE GOVERNOR-GENERAL OF THE PHILIPPINE ISLANDS,

Manila, April 8, 1909.

Respectfully returned to the Municipal Board, Manila.

It is not expected to run drains into or fill in lots belonging to the San Lazaro Estate. That is the duty of the Bureau of Lands. The Bureau must fill in the lots which are unsanitary and must bring the drains to the line of the street, where the city should have drains provided in the streets to carry the water from such lots. *Where large districts require drainage and there is no outlet for the water or drainage, it is the duty of the city to provide streets or outlets or to condemn a right of way for drainage ditches in such district. It is useless to require property owners to drain their lands when no outlet has been provided by the city for such drainage. The attention of the Municipal Board is respectfully called to the fact that when streets are established and brought to grade, it is the important duty of the city to provide ample and suitable outlets for the water, which would otherwise be confined by reason of the raising of the street levels.*

In this behalf the attention of the Municipal Board is called to the case of *Conniff vs. The City and Country of San Francisco* (67 Cal., p. 45).

JAMES F. SMITH, *Governor-General.*

In point of fact, at the time of the Governor-General's visit practically nothing had been recently done to improve these streets of this estate except to construct certain temporary drains, this latter work having been really ordered by the Governor-General after he had been taken by me to inspect the shocking conditions on this estate in company with the Municipal Board; and having been carried out, not by the city engineer's office, but under the direction of the sanitary engineer of the Bureau of Health.

For more than four years earnest efforts have been made by the Director of Health, the Director of Lands, and the Secretary of the Interior to persuade the Municipal Board to perform its lawful duty by improving the street areas in this thickly settled portion of the city of Manila, a duty which should have been performed in any event out of due consideration for the inhabitants of this region; a duty the performance of which was, furthermore, imperatively necessary in order that

it might be possible to remedy shockingly unsanitary conditions which were disastrously affecting the public health of the city.

Not only has the Board signally failed to discharge its duty relative to the improvement of sanitary conditions on the San Lazaro Estate, by placing the streets as a whole in such condition that it would be possible for vehicles to pass over them during the wet season or by discharging its own duty in the matter of the removal of night-soil and refuse, but in doing this it has ignored the opinion of the Attorney-General as to its duty in the premises and has repeatedly failed to comply with the orders of the Governor-General, if *requests* from the Chief Executive are equivalent to orders, and I hold that they are.

In view of these facts, what is to be expected of this Board in those cases where the *initiative* in the matter of opening streets and building drains is left to it, under its general obligation to look after the interests of the city?

EPIDEMICS ARE EXPENSIVE.

The Municipal Board complains that the proposed improvements would cost a lot of money. May I suggest that epidemics also cost money? The recent epidemic in Manila cost the Insular Government approximately ₱203,000 in cash. It cost the city government a large additional sum. At what price shall we assess the lives that were lost; the suffering of cholera victims who recovered; the loss to the business interests of the city which resulted from marine quarantine and other sanitary restrictions, and from the long-continued delay in the landing of the officers and men from the United States battle ship fleet; and last but not least, the injury to the fair name of Manila through the resulting publication to the world of false and misleading statements relative to the sanitary conditions prevailing *in the city as a whole*?

Gentlemen, the net cost of the last cholera epidemic in Manila, if reduced to dollars and cents, would pay for the establishing of all needed public closets, the construction of enough streets and drains to make possible the sanitation of the thickly settled regions which now lack these improvements, and the betterment of many other unsanitary conditions!

A WORD OF WARNING.

Remember that cholera has not ceased to prevail in the provinces. Remember that just as surely as day follows night it will reappear at Manila, and that just so surely as we allow existing unsanitary conditions in the outlying districts of that city to continue so surely will it linger, injuring us in the future as it has injured us in the past!

We are now well toward the close of the dry season. What have we done to improve conditions and what are we going to do in the few weeks that remain until the rains, which may be expected to begin at the latest by the middle of June, render further sanitary work difficult?

SOME ACTUAL PROGRESS MADE.

The first effort toward securing progress, made by the Director of Health, consisted in forwarding the plans prepared by the sanitary engineer for the improvement of some of the worst unsanitary districts in Manila. Among the more important projects the following may be mentioned:

One for the correction of unsanitary conditions in the Barrio of Santa Monica, Tondo;

One for the immediate correction of unsanitary conditions in that part of Manila bounded by Calles Herran, Georgia, Vermont, Wright, San Andres and Dakota;

One for the drainage of the territory included between Calles Morriones, E. de la Reina and Manila Bay.

So far as appears these projects, prepared and forwarded in accordance with the provisions of existing law, have been carefully pigeon-holed by the Municipal Board or have been disposed of by referring them to the committee hereinafter mentioned, and may be expected to repose undisturbed for the present unless the Governor-General positively orders action upon them. However, some progress has been made.

APPOINTMENT OF THE SPECIAL COMMITTEE OF CITIZENS AND OFFICIALS.

On January 6, 1909, the Governor-General issued Executive Order No. 3, series of 1909, which reads as follows:

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,

EXECUTIVE BUREAU,

Manila, January 6, 1909.

Executive Order No. 3.]

Felix M. Roxas, president, Municipal Board, city of Manila; James F. Case, Director of Public Works; Dr. A. L. McLaughlin, Acting Director of Health; W. P. Wylie, city engineer, city of Manila; Enrique Mendiola, member, Municipal Board, city of Manila; Dr. Fernando G. Calderon, professor of obstetrics, Philippine Medical School; Daniel Earnshaw, jr.; H. L. Heath, and Simon Erlanger, are hereby appointed a committee of citizens and officials for the purpose of making a careful investigation of the following matters, and to make a report thereon to the Governor-General, with recommendations, to wit:

1. The location and extension of residence districts of the city of Manila which are swampy in character or overflowed during the rainy season;

2. The cost of draining such districts, or if that be impracticable, the cost of raising them to a level which will make them sanitary and fit for residence purposes;

3. The location and extent of areas which are so unsanitary as to make it inadvisable that they should continue to be occupied for residence purposes until they are drained or filled in; and

4. Whether the expense of the draining or the filling in of swampy, overflowed or low-lying districts or areas should be paid for by the property owners or by the municipal government. In case the expense is to be paid by the municipal government, can this expense be met out of current revenues, or will it be necessary to impose a special tax for that purpose.

JAMES F. SMITH, *Governor-General.*

On March 8, 1909, this order was reissued in the following amended form:

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
EXECUTIVE BUREAU,
Manila, March 2, 1909.

Executive Order No. 14.]

Executive Order Numbered Three, current series, is hereby amended to read as follows:

"Felix M. Roxas, president, Municipal Board, city of Manila; James F. Case Director of Public Works; Dr. A. J. McLaughlin, assistant Director of Health; W. P. Wylie, city engineer, city of Manila; Enrique Mendiola, member, Municipal Board, city of Manila; Dr. Fernando G. Calderon, professor of obstetrics Philippine Medical School; Daniel Earnshaw, jr.; H. L. Health, and Simor Erlanger are hereby appointed a committee of citizens and officials for the purpose of making a careful investigation of the following matters, and to make a report thereon and on such other matters pertaining to the sanitation of the city of Manila as the committee may deem wise to include in its report, to the Governor-General, with recommendations, to wit:

"1. The location and extent of residence districts of the city of Manila which are swampy in character or overflowed during the rainy season;

"2. The cost of draining such districts, or if that be impracticable, the cost of raising them to a level which will make them sanitary and fit for residence purposes;

"3. The location and extent of areas which are so unsanitary as to make it inadvisable that they should continue to be occupied for residence purposes until they are drained or filled in;

"4. *The cutting of streets and alleys through congested unsanitary areas, and providing sanitary sites for nipa shack dwellers forced out of the strong material districts;* and

"5. Whether the expense of the draining or the filling in of swampy, overflowed, or low-lying districts or areas should be paid for by the property owners or by the municipal government. In case the expense is to be paid by the municipal government, can this expense be met out of current revenues, or will it be necessary to impose a special tax for that purpose."

JAMES F. SMITH, *Governor-General.*

The step thus taken was fraught with great possibilities for good and for evil.

There can be no doubt as to the wisdom of formulating, at the earliest practicable moment, a comprehensive plan for the sanitary improvement of the city of Manila along the lines suggested in this order. In the past I have repeatedly found myself placed in a most embarrassing position in exercising the power of approval or of disapproval of orders for filling, vested in the Secretary of the Interior by paragraph (s) of section 3 of Act No. 1150, in such cases as the following:

A property owner possessed a triangular piece of land surrounded on all sides by streets. This land had been reasonably dry and sanitary until the city raised the level of three streets which completely enclosed it, thereby converting it into a bog hole. There were gutters in these streets *but they were of no use to the property owner as the water obsti-*

nately refused to run uphill into them! The city engineer held that the owner ought to be compelled to fill his land, while the sanitary engineer of the Bureau of Health argued that it was unjust to compel him to do so for the reason that the street level had been improperly fixed and that if a proper level had been adopted both this and numerous adjacent pieces of property could have been rendered dry and sanitary by the inexpensive expedient of connecting them with street gutters at a proper level, which would in turn have emptied into a neighboring estero.

Failure of others finally to fix street and drain levels has been made the basis of many excuses for doing nothing by the city engineer. In one instance during the recent cholera epidemic, when it was imperatively necessary immediately to drain an unsanitary area, I asked the city engineer whether we could not accomplish the desired result by running a ditch some 200 meters long to a neighboring estero. He replied that he did not know, as he had been waiting *four years* for some one to give him a line. *To run that particular line about sixty minutes!*

THE WORK OF THE SPECIAL COMMITTEE OF CITIZENS AND OFFICIALS.

The most important act of this committee thus far would seem to be set forth in the following communication:

CITY OF MANILA,
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,
OFFICE OF CITY ENGINEER,
January 15, 1909.

Sr. FELIX ROXAS,
Maj. J. E. CASE,
Mr. H. L. HEATH,

Subcommittee to Special Sanitary Committee, Manila, P. I.

GENTLEMEN: At the meeting of the special sanitary committee appointed by the Governor-General, held on January 9, 1909, the following resolution was passed:

“Resolved, That the Governor-General be requested to instruct the department of engineering and public works to prepare a map of the city of Manila on a large scale, showing:

- “All streets and alleys;*
- “All esteros with their bottom levels;*
- “All land occupied by houses divided into strong material and nipa sections;*
- “All land unoccupied;*
- “All sewer lines as will be upon completion of the new system;*
- “All storm-water lines as will be upon completion of the new system;*
- “All water lines as will be upon completion of new system;*
- “All street levels;*
- “Six-inch contour lines in red ink, covering all lands within the city not up to established city grade lines;*
- “Six-inch contour lines in black ink, for all lands up to or above established city grade lines;*
- “The purpose of this map being for the accurate information of the committee in its duties. Upon this map it is the intention of the city to locate.*

"Sanitary areas having bad drainage;

"Unsanitary areas having bad drainage;

"Sanitary areas having good drainage;

"Unsanitary areas having good drainage;

"Present ownership of unsanitary areas;

"Present ownership of sanitary areas;

"This map to accompany and be a part of the report of this committee with the recommendations to the Governor-General."

It being the sense of the committee that the foregoing resolution should be presented in person to the Governor-General, committee consisting of Mr. F. M. Roxas, Maj. J. E. Case, and Mr. H. L. Heath, was appointed to present the same in person.

During the discussion upon the resolution, it appeared that the work specified therein would require from six to twelve months for its completion, and that an appropriation for this specific purpose will be required to carry out its provisions.

Respectfully,

W. P. WYLIE,

Secretary Special Sanitary Committee.

Copy respectfully furnished Mr. Felix M. Roxas.

[First indorsement.]

EXECUTIVE BUREAU,

January 20, 1909.

Respectfully referred to the Municipal Board of the city of Manila.

A subcommittee to special sanitary committee has waited upon me with a request that certain data, facts, plans, maps and other things be furnished to this committee. It seems to me that that which is required by the committee is necessary for its work. I have some doubt as to whether the six-inch contour is absolutely necessary, but the committee is the better judge of that matter and I am convinced that the committee should be furnished with all that it requires.

I am informed by Major Case that ₱5,000 will be necessary in order to make surveys, establish grades and determine the levels of esteros, and finish the maps required. It is suggested to the Municipal Board that they appropriate at once from the cholera fund the sum of ₱5,000 for this purpose.

JAMES F. SMITH, *Governor-General.*

If this means that the preparation of plans for the sanitary improvement of the worst districts of the city of Manila are to be delayed from six to twelve months for the completion of a map, then in my opinion this committee will have demonstrated its tremendous potentialities for evil. There are numerous unsanitary areas known to be badly drained and to be susceptible of being well drained. The improvement of such areas by the construction of proper temporary drainage systems could and should begin at once. Definite plans for such improvement have been prepared by the Sanitary Engineer and submitted to the Municipal Board. Why should this committee not pass upon them, once for all, and make such recommendations that the work will begin in the immediate future?

The whole city of Manila has already been surveyed and resurveyed. These particular areas have been surveyed *again* by the sanitary engineer!

Are we now to do additional surveying and map making, which will take a period of six to twelve months, and will at the very best carry us fairly into the next rainy season, before we make any move toward remedying such conditions when they can so readily be remedied at comparatively small expense?

To put the whole matter in a nutshell, if this committee acts *promptly* upon the matters requiring most urgent attention so that work may begin, and then devotes itself successfully to the preparation of a general, definite and final plan for the sanitary improvement of the city of Manila it will be an unmixed blessing. If it delays all action for the improvement of the outlying districts of the city of Manila until six-inch contour lines covering all lands in the city of Manila not up to established grade have been made it will, in my opinion, be a very great evil. Of what immediate importance will it be, in our effort to remedy unsanitary conditions in a group of swampy, filthy lots in the city of Manila, if we have six-inch contour lines showing the exact location and depth of each mud puddle on the property in question when we already know without the running of another line that the existing difficulty may be remedied if the city will run a main gutter or ditch so that the Director of Health may compel private owners to drain their lots into it?

COMPLETION OF THE NEW WATERWORKS.

On November 12, 1908, the new waterworks system for the city of Manila was opened. The source from which the city water is now drawn is such as to do away, once for all, with the danger of a general infection of the water supply; a menace which of necessity continued to hang over us so long as our drinking water was drawn from the Mariquina River below the towns of Mariquina, San Mateo, and Montalban. This in itself is a long step forward.

NUMBER OF PUBLIC CLOSETS INCREASED.

Numerous new public closets have been installed in thickly settled districts, for the most part at the cost of the city, although those located on the San Lazaro Estate were paid for by the Bureau of Lands. This also is a substantial and important improvement.

UNSANITARY BUILDINGS VACATED OR REMOVED.

During the period from February, 1908, to February, 1909, the Director of Health has issued one hundred and twenty-three orders that buildings be vacated or removed, and as a result many of the most unsanitary buildings in the city have been done away with.

THE EFFORT TO PROVIDE SANITARY BUILDING SITES.

In the effort to supply land for persons evicted a large tract has been provided by the Bureau of Lands on the San Lazaro Estate, while another was secured on the Hacienda Baclaran by the Acting Director of Health.

An offer of much-needed land on the Hacienda Santa Mesa was voluntarily made on behalf of the owners of the property and its acceptance was urged by the Acting Director of Health. The matter was complicated by the action of the city engineer, who estimated for the *complete construction* of a city street *where only the acceptance of a gratuitously offered right of way was requested*, and by the Municipal Board in raising a question as to the authority of the agent, to offer the land.

The importance of the efforts made to assist evicted persons in securing proper sites for their future homes can hardly be overestimated. I have always contended that it was well-nigh useless to drive people out of unsanitary structures as long as some effort was not made at the same time to aid them to secure sanitary sites, and unless they were compelled in rebuilding to erect sanitary structures.

As long ago as 1902 the then existing Board of Health urged the city authorities to interest themselves in the construction, on city or Insular Government land, of sanitary tenements for the poor. It demonstrated that if such tenements were constructed not only would the more or less continuous expense involved in attempting to maintain naturally unsanitary districts in a comparatively innocuous state be avoided, but the tenements would prove a source of actual revenue to the city.

Unfortunately no interest was taken in this project by the city authorities and it died of inanition. The recent effort to interest the Municipal Board in securing suitable building sites for persons compelled to leave unsanitary buildings has, as above stated, been productive of little result, and the only land secured has been obtained through the active interest of the Director of Lands and the Acting Director of Health.

So far as I am aware, the rendering of this kind of aid to poor people who are compelled to leave their homes and to build new houses, is not the *legal* duty of anyone, but it is a matter in which the city is most vitally interested and in my opinion it is to be deeply regretted that the Municipal Board has displayed such apathy that practically the whole onus of it has necessarily fallen upon two of the Bureaus of the Department of the Interior.

DRAINAGE WORK.

On October 24, 1908, with the approval of the Governor-General, the sum of ₱5,000 was made available by the Municipal Board for experimental drainage work. Of this amount ₱3,778.59 were spent on the San Lazaro Estate and ₱1,221.42 on the San Sebastian area. On November 13 the Director of Lands made ₱5,000 available for use in supplying interior drainage on the San Lazaro Estate. On December 10 the Mu-

municipal Board appropriated an additional ₱1,500 for the completion of temporary drains on all streets south of Calle Tayuman on the San Lazaro Estate.

As a result of these several appropriations all parts of the San Lazaro Estate are now supplied with properly graded open drainage canals in the streets and interior alleyways, while 530 meters of alleyways have been provided with stone gutters.

EXTENSION OF WATER SYSTEM.

Additional water hydrants have been installed as follows:

Two in barrio of Palumpung between Santa Monica and Gagalangin.

One in the barrio of Palomar.

One in the barrio of Santa Clara.

Three in the barrio of San Roque, near Balic-balic.

One at corner of Cervantes and Tayuman.

One at corner of Cervantes and Tayabas.

One on Cervantes near railroad crossing.

One at end of Cervantes near San Leyes.

Two are being installed on Can San Leyes.

RECOMMENDATIONS.

Before radical and permanent sanitary improvement in the city of Manila can be hoped for the following things must be done:

1. An adequate number of public pail sheds must be installed so that the poorer inhabitants may justly be compelled to use them and that the necessity for disinfecting square miles of territory, which existed during the last cholera epidemic, may be avoided.

2. The water supply system must be extended to all thickly settled unsanitary districts so that their inhabitants may be freed from the temptation to drink filthy water from esteros and shallow surface wells.

3. The street system of the city must be extended so as to make possible the removal of night-soil, garbage and other harmful waste substances from all thickly settled unsanitary districts, and the city must attend to such removal.

4. The general drainage system of the city must be extended, to the end that private owners may be *able* to drain their lots and that the sanitary engineer or the Director of Health may, without injustice, *compel* them to do so if necessary.

5. The city engineer must be compelled to enforce the building ordinances or the power to enforce them must be removed from him and conferred upon the Director of Health.

The proper enforcement of the building ordinances could be arranged for in a very simple manner, without additional legislation, were the Director of Health to forward to the Municipal Board for approval an

amendment to the existing health ordinances making the necessary transfer of powers relative to the sanitary inspection of buildings, and were the Board to approve it.

It is not seen why the Board should object to doing this. The work has always been distasteful to the city engineer who constantly pleads, as an excuse for his failure to perform it, the utter inadequacy of his force. He could, therefore, have no just cause for complaint were it transferred to some other office which could and would employ a force sufficient to perform it.

The unsanitary conditions due to the existence in Manila of large tracts of low, undrained land can not, under the most favorable circumstances, be remedied immediately and it is idle to demand impossibilities, but the Secretary of the Interior and the Director of Health do insist that in the immediate future there should be smaller expenditure in connection with expensive projects for beautifying the city and materially increased expenditure for the sanitary improvement of its worst districts.

They further insist that the construction of all needed public pail sheds and the extension of the city water system should be provided for and carried out at once and that, at the very least, temporary drains should be constructed in the worst districts without awaiting the final fixing of street lines and the construction of streets.

ANOTHER WORD OF WARNING.

Your attention is earnestly invited to the following facts: Cholera has not disappeared from the provinces; with the existing force at the disposal of the Director of Health it is materially impossible to remedy this condition of affairs.

The rainy season will soon be upon us again. Shall we have a repetition of last year's costly experience while we are making elaborate maps and bickering over the obligations of the city and the Director of Health in the matter of bringing about the sanitary improvement of private property?

Shall we continue to drive the unfortunate poor of the city out of unsanitary shacks only to allow them to erect others? Shall we make no systematic effort to aid them in finding, and securing the use of, healthful sites for their new dwellings? Or without waiting for the report of any committee shall the policy and the responsibility in each of these several matters be now definitely and finally fixed to the end that we may get early action?

ADDITIONAL HISTORIC DATA AND REPORTS CONCERNING CHOLERA.

If now only remains for me to bring the historical part of this report up to date.

One of the ends subserved by the publication of reports is that public

attention is attracted to the subjects discussed, and that additional information of importance is likely to be forthcoming. This has occurred in the present instance.

Señor Epifanio de los Santos, fiscal of the Province of Bulacan, who for many years has been engaged in collecting and studying historical works in which mention is made of Philippine affairs, has written me a letter containing interesting and important data derived from sources which have not been accessible to me. He shows conclusively that the occurrence of cholera in the Philippines in 1812 is a matter of record, and gives much valuable information relative to the earlier epidemics. He further says that an epidemic occurred in 1843. His letter is appended hereto as Exhibit A.

The results of practical experience in dealing with epidemic diseases are always of value. The Acting Director of Health presented to the Manila Medical Society a paper entitled "The suppression of a cholera epidemic in Manila," and under date of November 13, 1908, he forwarded to the Secretary of the Interior a supplementary report. These documents are appended and are marked Exhibits "B" and "C," respectively. The recommendations embodied therein were prepared by the Acting Director of Health without consultation with me.

At the meeting of the Medical Society above referred to there were presented the following additional important papers relative to cholera:

"A Summary of the Results Obtained in the Bacteriological Diagnosis of Cholera," by Moses T. Clegg;

"Indications for Treatment in Asiatic Cholera," by Dr. Richard P. Strong, Chief of the Biological Laboratory;

"The treatment of Cholera, a Summary of the Experiences of the Physicians at the Mary Johnston Cholera Hospital," by Henry T. Nichols, lieutenant, Medical Corps, U. S. Army.

These papers are also appended and are marked respectively, Exhibits "D," "E" and "F."

On December 22, 1908, the special committee of the Manila Merchants' Association made its report, forwarding a copy of it to the Governor-General. This valuable and interesting document is marked Exhibit G.

The undersigned received from the chairman of the committee of the Manila Merchants' Association a copy of the reply of Member McDonnell of the Municipal Board to strictures of the committee relative to certain unsanitary conditions in the city of Manila. Transmitted with this communication was what purported to be a compilation of the Acts of the Philippine Commission embodying various ordinances under which the sanitary work in the city of Manila is performed. I sent a reply to this communication which incidentally contains a discussion of the attitude of certain members of the Municipal Board in attacking the Bureau of Health for failing to do its duty by compelling the abandonment of unsanitary dwellings and sites on the one

hand, while on the other they pose as the would-be friends of the unfortunate persons made victims of the arbitrary action of the Bureau of Health by being compelled to leave their happy homes!

A copy of this communication was sent by me, through the Governor-General, to the Municipal Board. It is appended hereto as Exhibit H.

Finally I have included an English translation of an article entitled "Always Persecuted" which appeared in a Filipino paper. It affords a demonstration of the attitude of a portion of the native press toward sanitary work which will be of especial interest to readers in the United States.

Respectfully submitted.

DEAN C. WORCESTER,
Secretary of the Interior.

BAGUIO, *April, 2, 1909.*

ADDENDUM.

The opinion of the Attorney-General, rendered in accordance with my request of February 9, finally reached me on April 17, having been forwarded with the following indorsements:

"[Second indorsement.]

"THE GOVERNMENT OF THE PHILIPPINE ISLANDS,

"OFFICE OF THE ATTORNEY-GENERAL.

"April 12, 1909.

"Respectfully forwarded to his Excellency the Governor-General.

"The within opinion is addressed to the honorable the Secretary of the Interior, and has been held since the 3d instant owing to the fact that under date of April 1 in a communication to your excellency, the honorable the Secretary of the Interior withdrew his request for same. The opinion is now forwarded to you in pursuance of your telephonic request therefor.

"IGNACIO VILLAMOR, *Attorney-General*.

"[Third indorsement.]

"THE GOVERNMENT OF THE PHILIPPINE ISLANDS,

"EXECUTIVE BUREAU,

"Manila, April 13, 1909.

"Respectfully referred through the honorable the Secretary of Finance and Justice, to the honorable the Secretary of the Interior.

"JAMES F. SMITH, *Governor-General*.

"[Fourth indorsement.]

"THE GOVERNMENT OF THE PHILIPPINE ISLANDS,

"DEPARTMENT OF FINANCE AND JUSTICE,

"Manila, April 16, 1909.

"Respectfully forwarded to the honorable the Secretary of the Interior.

"GREGORIO ARANETA,

"*Secretary of Finance and Justice*."

On April 26, 1909, the Attorney-General stated in a communication to the honorable the Secretary of Finance and Justice, that the extraordinary delay in this matter was due to lack of sufficient assistance in his office and to his own illness.

The letter of the Attorney-General, communicating his opinion, reads as follows:

"MANILA, April 3, 1909.

"SIR: In reply to your communication of February 9, 1909, I have the honor to state that on December 17, 1908, the Acting Insular Auditor submitted to this office for an opinion the question whether or not the owners of real estate

in a highly unsanitary condition may be judicially compelled to make the necessary improvement on said estate for the purpose of abating the nuisance. In an opinion, rendered on December 24, 1908 (Off. Gaz., Vol. VII, p. 279), this office held that 'it is within the power and clearly the duty of the Director of Health to notify the owners of the property in question of the maintenance by them of the said nuisance thereon and requiring that they shall, within the time and manner specified in the notice, abate the same, and should such property owners neglect or fail so to do, they are then subject to prosecution for the maintenance of said nuisance in the manner provided for in the provisions of law hereinbefore quoted, and, as the nuisance is a continuing one, may be repeatedly prosecuted and fined or imprisoned, or both, until they shall have complied with the requirements of the orders of the Bureau of Health in the premises.'

"It is stated in your communication that said opinion of this office 'has, however, been understood to apply to the specific unsanitary conditions arising in low and poorly drained lands. In point of fact this particular question is one of the two important questions relative to the avoiding and remedying of unsanitary conditions which are now pending between the Bureau of Health and the Municipal Board, and I understand that the ruling requested of the Auditor was in connection with contemplated improvements on such lands.'

"I should like to state, however, that said opinion of December 24, 1908, was limited in its scope to the question presented to this office and only referred in general terms to 'nuisances dangerous to the public health,' without including the specific case of low and poorly drained lands which constitute a menace to the public health.

"Now, the opinion of this office is requested on the following questions:

"1. What officer should, in accordance with paragraph (s) of section 3 of Act No. 1150, and section 793 of the Revised Ordinances of the City of Manila, call upon and require the owner of any such premises to make the same sanitary by filling, draining, etc?

"2. Whether or not under the authority of the proviso of said section the city engineer is authorized himself, or through his agents, to remedy such unsanitary conditions and in the event that he is, who shall pay for the work?

"3. As to the bearing of paragraph (a) of section 12 of Act No. 1150 upon the general question of who should do the work of the sort referred to in said paragraph, and who should pay for it, in view of the fact that the law requires the plans and estimates of the cost of such sanitary work to be submitted to the Municipal Board.

"I shall now proceed to answer the questions propounded in the order they have been stated.

"1.

"Section 3 of Act 1150 provides as follows:

"The ordinances drafted by the Board of Health may provide for—

* * * * *

"(s) Cleansing, drainage, or filling in of lowlands where such lands are in an unsanitary condition and in the opinion of the Board of Health constitute a serious menace to the public health: *Provided*, That no order for the cleansing, drainage, or filling in of such lands involving a cost of more than three hundred pesos, Philippine currency, shall be effective without the approval of the Secretary of the Interior, who may request from the Sanitary Engineer of the Philippine Islands a report as to the cost of cleansing, drainage, or filling in of any such piece of lowland, and the sanitary engineer shall make such report when requested.'

"By virtue of this authority, the Board of Health drafted Ordinance No. 86, which was approved and adopted by the Municipal Board of the city of Manila, in pursuance of the mandatory provisions of section 1 of Act 1150, as an ordinance of the city of Manila. Section 224 of said ordinance, which corresponds to section 793 of the Revised Ordinances, provides as follows:

"Where any premises within the limits of the city are composed of lowlands, or are so excavated or walled, diked, or dammed as to admit or cause the formation on the surface thereof of stagnant or foul waters which are a nuisance and a menace to the public health, the city engineer may call upon and require, subject to the limitations of subsection (s) of section three of Act Numbered Eleven hundred and fifty of the Philippine Commission, the owner of any premises whereon such pools may exist to fill up the same with good clean earth or other approved material to the level of the surrounding ground, or to drain such pools by means of surface drains into any channel with which such surface drains may lawfully communicate, or to cut or breach any retaining walls, dike, or dam so that such retained water may have free escape: *Provided*, That whenever the Director of Health shall declare that any lowland, marsh, or stagnant pool in the city of Manila is in an unsanitary condition and constitutes a serious menace to the public health, the city engineer shall take steps to cause the said lowlands, marshes, stagnant pools, or ponds to be cleansed, drained, or filled in and the unsanitary conditions removed."

"The wording of section 793 of the Revised Ordinances of the City of Manila clearly shows that the city engineer is authorized to require the owner of lowlands to drain the same (subject to the limitations of subsection (s) of section 3 of Act 1150).

"As stated in the aforesaid opinion of December 24, 1908, the Municipal Board of the city of Manila was not empowered by its Charter prior to the enactment of Act 1150 to require the owner or tenant of any land or building to cleanse the same at their own expense, or, upon failure to comply with such a requirement, have the work done and assess the expense upon the land or building, as are municipalities organized under Act 82, in pursuance of subsection (n), section 39 of said Act. *Undoubtedly the intention of the Philippine Commission in passing Act 1150, which makes the Bureau of Health the municipal board of health for the city of Manila with authority to draft, for approval by the Municipal Board of Manila, health ordinances for that city, was to remedy this deficiency in the city charter.*

"The language used by section 3 of Act 1150, 'The ordinances drafted by the Board of Health may provided for the cleansing, drainage, or filling in of lowlands, etc.,' though differing from the terms used in section 39 (n) of Act No. 82, has, however, the same meaning—i. e., *that the work of filling or cleansing be made at the owner's expense.* I understand that the power conferred upon the Board of Health by Act 1150 to draft ordinances providing for the cleansing, drainage or filling in of lowlands carries with it authority for establishing the procedure, the manner and conditions under which such cleansing, drainage, or filling must be accomplished. The act of asking or requiring the owner of low land (sec. 793 of the Rev. Ord.) to fill the same with good, clean earth or other approved material, subject to the limitations of subsection (s) of section 3 of Act 1150 means nothing but that when the cost involved does not exceed ₱300 the owner should do it at his own expense; but when the cost involved exceeds ₱300 it shall be necessary to obtain first the approval of the Secretary of the Interior in order to require such filling to be done.

"The law might result too strictly in those cases where the value of the property is far inferior to the cost of the improvement; but, in view of the terms

used in section 793 of the Revised Ordinances, it is difficult to say how it could be otherwise construed. The limitations set forth in subsection (s), section 3 of Act 1150 are intended to mitigate the rigor of the law and to protect owners of lowlands of small value from being put to the expenditure of large sums of money, for the Secretary of the Interior, upon the information received from the sanitary engineer, may approve or disapprove the order of filling, or take such other action as may be advisable according to the facts in the case.

"Therefore, I am of the opinion that the city engineer is authorized to require owners of lowlands to cleanse, drain, or fill the same in accordance with section 3, subsection (s) of Act No. 1150 and section 793 of the Revised Ordinances of the City of Manila.

"2.

"The other question on which the opinion of this office is requested is whether or not the city engineer is authorized, by himself or through his agents, to remedy the unsanitary conditions existing in the lowlands, marshes, stagnant pools, or ponds in the city of Manila; and in such event who should pay for the work?

"The proviso of section 793 of the Revised Ordinances, referred to in the preceding question, reads as follows:

"*Provided*, That whenever the Director of Health shall declare that any lowland, marsh, or stagnant pool or pond in the city of Manila is in an unsanitary condition and constitutes a serious menace to the public health, the city engineer shall take steps to cause the said lowlands, marshes, stagnant pools, or ponds to be cleansed, drained, or filled in and the unsanitary conditions removed.'

"*The second question propounded must be answered in the affirmative.* Since the Municipal Board is vested with authority to enact an ordinance of the nature contemplated in subsection (s), section 3 of Act 1150, and has enacted such an ordinance authorizing the city engineer to carry out the provisions of subsection (s), said officer or his agents are undoubtedly authorized to take all the necessary steps to have all the lands declared by the Director of Health as lowlands and a menace to the public health filled up.

"With reference to the question as to who shall pay for the filling above referred to, I observe a deficiency in the law in that it fails to provide that such improvements, being ordered, can be accomplished by the city engineer and the cost made a lien against the property, or some such similar arrangement. But I believe the compliance with this ordinance and the order to cleanse, drain, or fill may be imposed in the same manner as every other ordinance of the city of Manila, and section 813 of the Revised Ordinances says:

"Any person in the city of Manila who shall violate any section or part thereof of this title * * * or any regulation made in accordance therewith may be proceeded against as prescribed by the provisions of section five of Act Numbered Eleven hundred and fifty of the Philippine Commission.'

"And section 814 says that:

"Any person * * * who shall violate any provision of any section or part thereof of this title [that is, title 11, Public Health, p. 240] * * * or any sanitary regulation of the Bureau of Health made in pursuance of law, shall, upon conviction, be punished by a fine of not more than two hundred pesos or by imprisonment for not more than six months, or by both such fine and imprisonment, in the discretion of the court, for each offense.'

"Section 793 of the Revised Ordinances is a health ordinance, passed in pursuance of section 3 (s) of Act No. 1150, which Act is entitled 'An Act further defining the powers and duties of the Board of Health for the Philippine Islands and of the Municipal Board of the city of Manila in connection with the pres-

ervation of the public health of that city, * * *,’ and section 5 thereof contemplates that any health officer is empowered, and it is made his duty, to make complaint under oath in writing before the municipal court of Manila against any person violating any health ordinance, and it shall be the duty of that court to issue a warrant for the arrest of such person so complained of, and, when arrested, to try him as in other cases of violations of city ordinances.

“There is not one scintilla of evidence that the Commission in enacting section 3 (s) of Act No. 1150 intended that the city of Manila should fill any lowlands belonging to private parties, nor does such intention appear in section 793 of the Revised Ordinances. If that was the intention, the Commission and the Municipal Board have absolutely failed to express same. At the time Act 1150 was passed appropriations for the city of Manila were made by the Commission. The appropriate method of expressing such an intention would have been for the Commission to make an appropriation of so many thousand pesos to be expended for the purpose of filling in any or all such lowlands as are contemplated by the section, upon the approval of the city engineer and the Secretary of the Interior; that would have been all that was necessary. But the filling in of lowlands is an expensive proceeding and after same have been filled or drained the property is rendered far more valuable to the owner, and to hold that the legislation under consideration has created authority in the city engineer, or health officials, and the Secretary of the Interior to fill in lowlands of private ownership at the city’s expense is virtually taking public property for private uses without due process of law, and it places the city of Manila in the anomalous position when health officers, the city engineer, and the Secretary of the Interior have issued an order requiring the filling in or draining, of violating its own ordinance if it is unable to furnish the necessary money or if it fails to make provisions for securing the same for said purpose. The intention of the Commission is perfectly clear, that where lowlands exist which are a menace to public health they shall be filled in. There is no more reason for holding that it was the intention to have the city of Manila fill in or drain lowlands than there is for saying that it was the intention to have the city of Manila pay for all necessary expenses incurred by reason of enforcing compliance with the other subsections of Act 1150, section 3, from (a) to (r). For instance, take subsection (d), which refers to drainage and plumbing; it is public knowledge that many thousand pesos have been spent in the city of Manila in pursuance of orders of health officials to renovate plumbing systems or drainage systems in private homes at the owner’s expense.

“3.

“‘As regards the third question proposed, paragraph (a) of section 12 of Act 1150 provides as follows:

“‘The sanitary engineer shall inspect buildings, plumbing, waterworks, drainage and sewer systems, streams, and esteros within the limits of the city of Manila, reporting the result of such inspection to the Board of Health, and at the request of the Board of Health shall submit plans for and estimates of the cost of remedying unsanitary conditions discovered by him. He shall further, at the request of the Board of Health, prepare and submit to the Board plans and estimates of the cost of improving the general sanitary condition of unhealthful districts in Manila, and shall perform such other sanitary engineering work in the city of Manila for the Board of Health as the Board may direct.’

“The question as to who shall execute the work mentioned in the preceding paragraph, can not be possibly answered in a positive manner. In the first place, ‘the sanitary engineer shall, at the request of the Board of Health, prepare plans for and estimates of the cost of remedying the unsanitary conditions discovered

by him;' in the second place, 'he shall prepare and submit plans and estimates of the cost of improving the general sanitary condition of unhealthful districts in Manila;' and in the third place, 'he shall perform such other sanitary engineering work in the city of Manila for the Board of Health as the Board may direct.'

"The provisions of paragraph (a) of section 12 of Act 1150 should be applied to specific cases according to their respective circumstances; since there may be cases in which not only private individuals are concerned but also the Insular Government itself, and in which the expense incurred under this section may not perhaps have to be borne exclusively by the city of Manila.

"In view of the general terms used in said provisions, I am constrained to say that it will be more convenient to leave the decisions of specific cases with the Insular Auditor. This office has decided more than once not to render any opinion on hypothetical questions.

"Very respectfully,

"IGNACIO VILLAMOR,

"Attorney-General.

"To the Honorable the SECRETARY OF THE INTERIOR,

"Manila, P. I."

Referring to the paragraph which reads—

"I should like to state, however, that said opinion of December 24, 1908, was limited in its scope to the question presented to this office and only referred in general terms to "nuisances dangerous to the public health," without including the specific case of low and poorly drained lands which constitute a menace to the public health"—

I can only express my surprise, in view of the fact that the case which called forth this opinion was a case of action desired to be taken by the city in remedying unsanitary conditions on low and poorly drained lands, that the Attorney-General, in rendering it, should not have deemed it necessary to refer to the law dealing with the subject in question, but should have contented himself with referring in general terms to nuisances dangerous to the public health.

With the conclusions of the Attorney-General as to the meaning and effect of the existing provisions of law, once they were called to his attention, I have no quarrel. So far as they cover the same subjects, they are in substantial accord with those before reached by me and set forth in this appendix.

DEAN C. WORCESTER,

Secretary of the Interior.

EXHIBIT A.

[Translation.]

THE PROVINCIAL GOVERNMENT OF BULACAN,
Malolos, Bulacan, November 24, 1908.

HON. DEAN C. WORCESTER,
Secretary of the Interior, Manila, P. I.

MY DEAR MR. WORCESTER: I take pleasure in acknowledging receipt of your favor of the 17th instant, and of the English copy of your notable work, "History of Asiatic Cholera in the Philippine Islands."

* * * * *

With regard to your report, I must frankly inform you that I have been delighted to read it. Up to the present moment it is the most scientific report written on the subject in the Philippine Islands. Your dissertation with regard to the subject during the past régime is brilliant, notwithstanding the scarcity of material available, which you were almost compelled to improvise. However, the date that you record as the first year when cholera appeared in the Islands, 1817, seems recent.

M. P. F. Keraudren, in his "Memoria de la Cólera morbo de la India, y su Método Curativo, etc." (Spanish version, Madrid, 1831), says on page 52:

"It was on January 22, 1812, when the royal frigate *Cleopatra* anchored in the roads of Manila, Philippine Islands, and on the 30th the cholera morbus appeared on board. * * * In a very short time the number of the sick had increased to thirty-two, and seven had died."

The author supposes that there was cholera at Manila at that date because the fourth of his conclusions contains the following:

"It is dangerous for vessels to go to and remain in a port where the cholera has appeared recently in an epidemic form, which is proved by the arrival of the frigate *Cleopatra* at Manila."

It would have been very instructive if you could have inserted in your report the curative methods employed during the past régime, especially beginning with 1820.

Don Manuel Lecaroz reprinted in 1820 the *Novena*: "Día diez y seis de cada mes, dedicado al culto y obsequio de Señor San Roque Especial Abogado contra todo género de peste y enfermedad contagiosa, etc.," of which a large number of copies was printed, which were sent to the parish priests for distribution to their parishioners, and to the "military officers,

in order that through the chaplains it be practiced likewise in the barracks, and in the hospitals and asylums by their chaplains, in the prisons by the wardens, and in the houses by the respective heads of families." As will be concluded, the method employed is prayer, the reading of the *Novena* for nine days or longer, beginning with the 16th of each month; and if the *Lord's Prayer* and *Hail, Mary* is said once at the end, the cholera patients will have eighty days indulgence. This *Novena* seems to be a reprint of that of 1795. Did the cholera exist in that year? During the same year a Tagalog version of this *Novena* was prepared by the "Ex-Definidor, Vicario Provincial y Foraneo del Partido de Bulacan," Friar Esteban Diez, parish priest of Baliuag. The motive for the publication of the *Novena* was, with regard to the Spanish edition: *The spiritual and temporal welfare of all the inhabitants of the Philippine Islands*, and with regard to the Tagalog version: compassion for the Tagalogs (aun rin naman niya sa sang Catagalugan) on the part of Friar Esteban Diez.

The botanist, Don Ginés Fernandez, surgeon of the infantry batallion *Principe Fernando*, published in 1821 the following work dedicated to Governor-General Mariano Fernandez Folgueras: "Colera morbo. Observaciones generales sobre el conocimiento y tratamiento de las Enfermedades. Dispuesto para la Gente del Campo, y aquellos que carecen de médicos en las provincias y aldeas" (Cholera Morbus. General Observations regarding the Knowledge and treatment of the diseases, prepared for the Inhabitants of the Country, and for those lacking Physicians, in the provinces and villages), in which he recommends the following prescription, which, according to the author, is miraculous:

"Take an ounce of brandy, and if there is none, of spirits of wine; dissolve in it three grains of camphor; add one scruple of vitriolic ether, and one scruple of liquid laudanum; mix these, and if this prescription is given in time, you will believe that you have performed a miracle: But it is not so, it being the work of nature."

Carlos Luis Benoit, who was surgeon of the French vessel *Alejandro*, and who escaped from the massacre of the foreigners in 1820, had an opportunity to study cases of cholera in Manila during the years 1820, 1821, 1822, 1823 and 1824, and inserts very curious things in his work, the title of the Spanish version of which, published in Madrid, 1832, is as follows: "Observaciones sobre el Cólera morbo espasmódico, ó Mordechi de las Indias Orientales, recogidas en las Islas Filipinas, y publicadas con su método curativo por el Dr. D. Carlos Luis Benoit, etc."

The following is a sample of the things said by this author:

(Page 100) "I can not but insert here the exact translation of the result of a consultation given by a Chinese physician on the occasion of His Excellency the Captain-General of the Philippine Islands, Don Juan Antonio Martinez, being attacked by *cholera* in the year 1824, which caused the greatest consternation to his entire interesting family.

"The General had me introduced to the Chinese surgeon Kanhi, who, after having spent an hour observing him and hearing him breathe, and two hours in feeling his pulse, told me, through the interpreter, the following:

"This disease is caused by a lack of *vital air*, of *blood*, and of *semen*. The kidneys are not relieved; their water does not suffice for the fire, and therefore the *passages* are *closed*; the patient does not urinate, and sometimes the urine dries, similar to the sky; when it does not rain, the earth dries. The patient must endeavor to preserve a tranquil mind, shun woman, and not tire his mind."

In the preceding pages I have not seen the data proving the existence of cholera in 1819 according to the summary of page 15 of your report. However, Sinibaldo de Mas affirms (pp. 64 and 65 of the second part of his *Informe*) that:

"In 1819 the cholera appeared, and this was the signal for the barbarous massacre committed with impunity on the persons of the foreigners and of a few Chinese who, because of the war of the year 1762, were looked upon with disfavor by the priests and by a large part of the population. * * * When martial law was proclaimed, the matter had already run its course because almost none of the foreigners who were the objects of public hatred remained alive. During the disorder several corporations and private citizens took treasure of great value to the fortress, in which nearly all the Spaniards who were living outside took refuge. This money was not attacked anywhere, because the simple statement that it belonged to a Spaniard enabled it to pass without difficulty. The same respect was shown to the Spanish houses.

"It seems that Folgueras, as his excuse for the assaults made by the Filipinos upon the foreigners, wrote to the court that he had not taken energetic measures previously because he had no confidence in the officers under his orders. * * *"

This statement of the fact, which is rather sibylline and mysterious, is clearly established by the proclamation of Governor-General Folgueras on October 21, 1820, addressed "To the Natives of the Philippine Islands, and especially to those of the district of Tondo."

In the body of this proclamation Governor Folgueras inserts the authorized report of the *Juez de Letras, Licenciado* Don José Maria Jugo, dated at Santa Cruz on October 15, 1820; here are the conclusions of this report:

"According to what has been shown, Your Excellency will see that the imputation that the French had done the poisoning either themselves or through third persons, has been merely a fable with which the uneducated masses have been deceived.

"However, this has not been the worst, but there have been many persons of whom it seems impossible to believe that they would concur in such a gross error; but the fact is that such is the case, many of these persons being members of the clergy, and that for this reason the illusion took such proportions that it caused scandalous deeds that are now being deplored by all good men, it being a fact that there is no better means of propagating an error than its being adopted by persons of authority.

"The belief of a poisoning doubtless originated from the ignorance of the Indians, but there is also no room for doubt that ill-minded persons, making use of this indiscretion and lack of enlightenment of the Indians, stirred them up to commit the murders and robberies of the disastrous 9th and 10th.

The best evidence for this opinion is that after the disturbance of the first

day, when the persons who deemed themselves offended by the French should have been satisfied, there came the second day, the 10th, when the movement was against the Chinese, who had not been accused of poisoning until that day; but on that day the motive for the disturbance was the rumor that spread that at a place on the Escolta a Chinaman or Chinamen had been caught poisoning, and this was sufficient cause for the rioters, who were already agreed, to begin to loot the shops and dwellings of the Chinamen with the utmost shamelessness and daring. * * *

For this reason Governor Folgueras absolves the Indians of their sins, addressing to them these kind words:

"Deceived and rendered furious by a few depraved persons, you have covered yourselves with horror and ignominy; you have for the first time contradicted the opinion that the world had of your virtues and hospitality; and while you have brought consternation to every reasonable mind, you have made yourselves an object of abomination and wrath for the nations that do not know your simplicity and credulousness which have been abused by the wicked instigators of the unfortunate events on those gloomy days, the 9th and the 10th of the current month."

Mr. Benoit, a French surgeon, miraculously escaped from the massacre, also absolves, in his way, these *Indians*, who, "though humble, religious and peaceable, were converted into furious murderers. * * *"

These quotations are rather lengthy but are very necessary to enable one to understand the lugubrious legend of the poisonings, and explain *mutatis mutandis*, the origin and duration of that legend, and of other things of the same or of a similar character.

You also failed to make mention of the cholera in 1843, though it was precisely during that year when the measures prescribed by the Board of Health as it then existed were issued for the prevention and treatment of said disease. It will, however, be difficult to obtain these sanitary ordinances, and for this reason, and on account of its importance, I shall copy them in full:

"INSTRUCTIONS PREPARED BY THE BOARD OF HEALTH OF THESE ISLANDS WITH REGARD TO THE MEASURES THAT MUST BE TAKEN IN ORDER TO PREVENT CHOLERA MORBUS AND ATTEND TO THE PATIENTS AT THE FIRST STAGE OF THE DISEASE.

"To avoid it, the following measures should be taken:

"Persons who are out of breath and perspiring must not expose themselves to a current of fresh air.

"Water must not be taken on an empty stomach or at midnight, or when in a state of perspiration.

"River water used for drinking purposes should first be strained through a clean cloth, and afterwards there should be added to it a decoction of *zambon*, of *flor de Santa Maria*, of manzanilla, sage, ginger, or toasted bread.

"To sleep exposed to the dew is very injurious and must be avoided with particular care; likewise, the windows of the sleeping rooms must not be left open, because the neglect of this precaution will result in catching cold and a cooling of the body.

"Clothing made of flannel, cotton or silk is useful for preserving a person from the disease, being much better than clothing made of linen or of native cloth.

"The eating of shellfish, or fish having a bad smell, whether dried or fresh, is injurious and may cause the disease, especially if the stomach is weak.

"Green fruit, and especially cold fruit such as melons, watermelons, *camias* and *banquillines* are also harmful, and it is advisable not to eat them.

"It is also injurious to take a bath while heated or after taking food, to eat while in the water or to remain a long time in the water.

"Lastly, it is essential and good for the health to keep the body clean, and likewise to keep clean the dwelling rooms, which must be sprinkled with vinegar from time to time.

"Whenever a person has stomachache, fits of vomiting, and stools with cramps, the following rules shall be observed:

"To protect the body with hot cotton or woolen blankets.

"Rub the body with rough cloth, fine brushes, hot flannel, spirituous liquors, or spirits of camphor.

"To apply fomentation to arms, legs and feet, and also to the spinal cord, using ground mustard seed and cold water.

"Hot cloths should be placed on the abdomen and changed frequently.

"It is advisable to drink in great quantities, or every half hour, *tajú*, or tea, or a decoction of *flor de Santa Maria*, or *sambon*, or ginger, mixing with the said beverages during the first two hours of the disease a teaspoonful of cologne, bitters, or brandy.

"The patients should be kept in a well closed room in order to obtain as soon as possible a ready and abundant perspiration.

"Lastly, apprehension or fear should generally be avoided because, as has been observed in Paris and in other European capitals, this state of mind has an influence on the body and predisposes it to the disease.

"The Presiding Governor,

"ORAL.

"Dr. PONCE, *Secretary*.

"MANILA, April 24, 1843."

It is a pity that I have no other special works on the subject available as, for instance, the "Folleto sobre el Cólera morbo asiático (Manila, 1879)," by the *Licenciado* Pedro Robledo y Gonzales; "Ensayo de un libro ó Manila, la Higiene y el Cólera * * *," of Don Francisco Capelo y Juan, who was Professor of the Faculty of Medicine (in Manila, 1883); another of the same year by Pedro Robledo y Gonzales, entitled "El Cólera en Filipinas. Memoria sobre la epidemia que se padeció en Vigan, capital de la provincia de Ilocos Sur, desde el 8 de Noviembre de 1882 hasta el 19 de Febrero de 1883," (written by superior order and published by the "Correspondencia Médica, Madrid"); "Memoria sobre el Cólera Morbo Asiático, con Ligeras Nociones sobre la Etiología de esta Enfermedad (Madrid, 1884)," by Ramon Alba y Martin, which is confined to the cholera in 1882 in Zamboanga; and the "Cartilla Higiénica y de desinfección. Con las Precauciones que deben tomarse en el caso de una Invasión Colérica," (anonymous publication, Manila, 1888).

However, in view of what you have stated in your report and what I have just said, the fact may be established that cholera began in the Archipelago in 1812, then again in 1819, and existed in a continuous manner

until 1824; then in 1842, 1843 (date of the sanitary ordinance), and in the years that you mention in your report.

The sanitary measures or curative methods mentioned, which are still practiced by a majority of the people, and which certainly do not owe their origin to the natives, and likewise the notorious poisonings, and the prayers and processions dedicated to San Roque, are of ancient origin and these practices were doubtless condemned by our physicians, including Dr. Rizal.

Fortunately, thanks to the amiability of Sr. Retana, I have before me the notes of Don Juan Sitges, who was politico-military commander in Dapitan in 1893, and who tells the following anecdote of Rizal:

(Notes 12 and 13.) "In Dapitan, the same as in all the missions of the Archipelago, there was a saint with a patronage and congregations for nearly all the contingencies of life, it happening that each street of a pueblo which had the name of a saint, added another patron saint to those of the population, which, together with the rest of the advocates of youth, good voyage, happy confinement, etc., brought great revenues to the mission because it meant for every *fiesta* the fees for a sermon, a high mass, and other fees, in addition to subscriptions that were taken up by the missionaries in the houses.

"The day of San Roque, the patron saint for the pest arrived, at a time when one of the Manila mail boats had come flying the yellow flag, and Father Obach, having gone to Rizal in order to ask him to contribute to a church function to petition the saint for protection, Rizal replied:

"But, father, how do you expect me to give anything to a competitor? Don't you see that if he delivers us from the pest I shall not have any patients?"

This anecdote is very good and of a wide scope, and I leave its application to your discretion.

What I have stated must not be taken as a charge against the state of affairs during the past régime, especially with regard to the first half of the nineteenth century, because it is an established fact that there was a scarcity of physicians, and modern hygiene had not extended as it has in recent times. On the contrary, we have to be very grateful to the herb doctors and botanists for their good desire to furnish us with miraculous prescriptions curing during the pest by enchantment, and to the good friars who wrote books destined to give us health, such as the "*Libro de Medicinas de esta Tierra * * **," of our countryman, the Augustinian friar, Ignacio Mercado; the famous "*Manual de Medicinas Caseras*," of the Dominican, Fernando de Santa Maria; "*Los Remedios Faciles * * **," of the Jesuit Pablo Clain; and "*Ang mahusay na paraan * * **," of Father Blanco, being the Tagalog version of the "*Aviso al Público*," of Tissot, who says more or less that the works of his colleagues Santa Maria and Clain are detrimental, and kill rather than cure.

I believe that I must conclude this long, drawn-out letter and discontinue taking up your time.

Wishing you health and prosperity, I am,

Very sincerely yours,

EPIFANIO DE LOS SANTOS.

EXHIBIT B.

THE SUPPRESSION OF A CHOLERA EPIDEMIC IN MANILA.

[By Passed Assistant Surgeon Allan J. McLaughlin, P. H. and M. H. S., Acting Director of Health for the Philippine Islands.]

The cholera epidemic of September, 1908, was probably a continuation of the outbreak which had its greatest intensity in January, 1908.

In January, 1908, there were 184 cases of cholera in Manila. In February, 14 cases of cholera were registered, and in March 3 cases were registered. In April, cases resembling cholera clinically began to present themselves, which bacteriologically were negative. In May, one case bacteriologically positive was reported on the 14th. In June, one case of true cholera was found on the 11th, and suspicious cases, resembling cholera clinically, but negative bacteriologically, were found on the 3d, 4th, 18th, 19th, 24th (2), 27th, 28th, and 29th. These cases resembled the true clinical picture of cholera more closely from day to day. Some were fatal in a few hours, and the intestinal contents yielded a motile vibrio which resembled the cholera vibrio but did not respond to the agglutination test.

These suspicious cases continued in July, as follows:

July 4, 1 case, suspicious cholera—negative bacteriologically.

July 8, 1 case, suspicious cholera—negative bacteriologically.

July 11, 1 case, suspicious cholera—negative bacteriologically.

July 13, 1 case, suspicious cholera—negative bacteriologically.

July 14, 1 case, suspicious cholera—negative bacteriologically.

On July 16 a case of typical cholera was found, and thereafter cases appeared in July, as follows:

July 21, 1 case, true cholera.

July 22, 1 case, true cholera.

July 26, 2 cases, true cholera.

July 28, 4 cases, true cholera.

July 29, 3 cases, true cholera.

July 30, 4 cases, true cholera.

July 31, 2 cases, true cholera.

In August, cases of cholera, bacteriologically confirmed, were as follows:

August 1.....	2	August 10.....	2	August 25.....	2
August 2.....	1	August 13.....	3	August 26.....	3
August 3.....	2	August 17.....	1	August 27.....	6
August 5.....	1	August 19.....	1	August 28.....	1
August 6.....	4	August 20.....	1	August 29.....	2
August 7.....	1	August 21.....	1	August 30.....	5
August 8.....	2	August 23.....	3	August 31.....	5
August 9.....	2	August 24.....	4		

These suspicious cases bridged over a gap between the outbreak of January, 1908, and that of September, 1908. One need only see these cases at the bedside or at the autopsy to recognize the possibility that they may be cases of cholera in which the vibrio has lost some of its properties, including its agglutinability with high dilutions of anti-cholera serum.

Kolle,¹ in a series of vibrios taken from cases in Egypt, which clinically were cholera, found only a few vibrios which did not agglutinate with anti-cholera serum. Kolle's conclusion was that these cases were cholera but that the cholera organism was not isolated because of faulty technique. His contention is that other vibrios are sometimes found in the human intestines which, in the enriching fluid, grow more vigorously than the cholera vibrios, and one may easily fail to isolate the cholera organisms. This seems unlikely to occur in any considerable number of cases, especially if the transfer to the hard medium is made direct from the stool, or after a very short time of growth in the peptone solution.

In September, from the 1st up to the 9th, there was an average of about three cases daily. On the 10th, the cases reached seven, on the 11th, nine, and on the 12th, seventeen. The course of the diseases is well shown on the chart showing the cases from September 1 to October 12, 1908.

September 1.....	3	September 16.....	37	September 30.....	11
September 2.....	1	September 17.....	25	October 1.....	12
September 4.....	6	September 18.....	24	October 2.....	10
September 5.....	4	September 19.....	43	October 3.....	5
September 6.....	4	September 20.....	60	October 4.....	9
September 7.....	4	September 21.....	55	October 5.....	11
September 8.....	5	September 22.....	38	October 6.....	6
September 9.....	3	September 23.....	45	October 7.....	8
September 10.....	7	September 24.....	40	October 8.....	13
September 11.....	9	September 25.....	44	October 9.....	8
September 12.....	17	September 26.....	37	October 10.....	6
September 13.....	11	September 27.....	14	October 11.....	3
September 14.....	10	September 28.....	18	October 12.....	4
September 15.....	16	September 29.....	13		

The high-water mark of the epidemic was reached on September 20, when 60 cases were reported in twenty-four hours.

When the number of cases reached 9 on September 11, the writer recognized the probability of an epidemic, and took personal charge of the operations. On September 12, the number reached 17, 12 being in Meisie district. Upon investigating this district, he found that in 18 cholera houses, that is, houses in which cases of cholera had occurred, in every case the closet was in a filthy condition. They had the following combination: Filthy closets, rats, flies, cockroaches, and other insects, and a kitchen immediately adjoining the closet. With this combination, all

¹ Zeitschrift für Hygiene, vol. 44.

What is necessary is the presence of the bacilli carrier, who, by using the closet, will furnish the infective material.

Two additional disinfecting squads were put to work immediately for the exclusive duty of disinfecting closets, and on the 13th, the cases dropped to 11, and on the 14th to 10. On the 15th, 16 cases occurred, and 105 additional men were employed. This force was increased as rapidly as possible without causing confusion and disorganization, and by September 22, the complete organization of 500 men was working smoothly. This force was increased by the 25th to 600 men.

ORGANIZATION.

The property division of the Bureau of Health purchased all supplies and equipment, with a very slight increase of personnel. The statistical division of the Bureau of Health took care of the records and statistics. The clerical division handled all financial transactions and current business. The department of sanitation and transportation of the city of Manila furnished ambulances, tank wagons, *carretelas*, *carromatas*, and horses.

The boundaries of the health districts already existing were left unchanged, the city being divided as follows:

Station J, Intramuros, including Malate and Ermita.

Station L, Paco, including Santa Ana, Pandacan, etc.

Station A, Meisic, including Binondo, Quiapo, and Santa Cruz.

Station C, Tondo.

Station I, Sampaloc.

The office force of each station was not increased, but the field force was enormously increased.

The organization of the field force in each district was as follows:

STATION A—MEISIC DISTRICT.

- 1 medical inspector, in charge of district.
- 3 municipal physicians, assistants to medical officer in charge.
- 1 sanitary inspector, in charge of all the men.
- 1 sanitary inspector, for inspection of disinfecting gangs and quarantines.
- 12 American foremen, each in charge of a lime squad.
- 24 Filipino lime throwers.
- 2 American foremen, each in charge of a disinfecting tank wagon and 6 men.
- 12 Filipinos, 6 for each disinfecting wagon.
- 1 chemical fire engine and crew.
- 1 disinfecting carretela, with crew of 5 men, disinfectants, and hand pumps, for room disinfection of cholera-infected houses.

Total personnel of station:

- 4 medical officers.
- 2 sanitary inspectors.
- 14 foremen.
- 136 Filipino laborers.
- 5 Filipino disinfectors.

Total, 161.

STATION C—TONDO DISTRICT.

- 1 medical inspector, in charge of district
- 2 municipal physicians, assistants to medical inspector.
- 1 sanitary inspector, in charge of all the men.
- 3 American foremen, in charge of lime squads.
- 1 American in charge of disinfection of wells and pools.
- 64 Filipino lime throwers.
- 3 foremen, each in charge of large disinfecting tank wagon and 6 men.
- 1 foreman, in charge of small tank wagon and 4 men.
- 22 Filipinos, on disinfecting wagons.
- 1 chemical fire engine and crew.
- 1 disinfecting carretela with 5 men.

Total personnel of station:

- 3 medical officers.
- 1 sanitary inspector.
- 8 foremen.
- 86 Filipino laborers.
- 5 disinfectors.

Total, 103.

STATION J—INTRAMUROS DISTRICT.

- 1 medical inspector, in charge of district.
- 1 municipal physician, assistant to medical inspector.
- 1 sanitary inspector, in direct charge of all the men.
- 1 sanitary inspector, in charge of disinfecting crews.
- 1 disinfecting carretela, crew of 5 men. Day duty.
- 1 disinfecting carretela, crew of 5 men. Night duty.
- 6 American foremen, in charge of lime squads.
- 100 Filipino lime throwers.
- 3 American foremen, each in charge of disinfecting tank wagon.
- 17 Filipinos, disinfecting tank wagons.
- 1 chemical fire engine and crew.

Total personnel of station:

- 2 medical officers.
- 2 sanitary inspectors.
- 9 foremen.
- 117 Filipino laborers.
- 10 disinfectors.

Total, 140.

STATION I—SAMPALOC DISTRICT.

- 1 medical inspector, in charge of district.
- 1 municipal physician, assistant to medical inspector.
- 1 sanitary inspector, in charge of all the men.
- 4 American foremen, in charge of lime squads; 25 men each.
- 100 Filipino lime throwers.
- 2 American foremen, each in charge of tank wagon and 6 men.
- 12 Filipinos, 6 on each tank wagon.
- 1 chemical fire engine and crew.
- 1 disinfecting carretela with crew of 5 men.

Total personnel of station:

- 2 medical officers.
- 1 sanitary inspector.
- 6 American foremen.
- 112 Filipino laborers.
- 5 disinfectors.
- Total, 126.

STATION L—PACO DISTRICT.

- 1 medical inspector, in charge of district.
- 1 sanitary inspector, in charge of all the men.
- 1 municipal physician, assistant to medical inspector.
- 1 foreman, in charge of tank wagon and 6 men.
- 6 Filipinos on tank wagons.
- 3 foremen, in charge of lime squads.
- 52 Filipino lime throwers.
- 1 disinfecting carretela, with crew of 5 men.

Total personnel of station:

- 2 medical officers.
- 1 sanitary inspector.
- 4 foremen.
- 58 Filipino laborers.
- 5 disinfectors.
- Total, 70.

Total personnel—all stations.

	Medical officers.	Sanitary inspect- ors.	Fore- men.	Labor- ers.	Disin- fectors.	Total.
Station A—Meisic	4	2	14	136	5	161
Station C—Tondo	3	1	8	86	5	103
Station I—Sampaloc	2	1	6	112	5	126
Station J—Intramuros	2	2	9	117	10	140
Station L—Paco	2	1	4	58	5	70
Total	13	7	41	509	30	600

NOTE.—This does not include police for house-to-house inspection, nor some 300 men of the city street cleaning force, who have been assisting in draining the worst places in the barrios, nor the Constabulary for quarantine guards.

Lime squads varied in size according to the district. In open districts, or sparsely settled districts, one foreman could properly supervise from 15 to 25 men. In a district like Meisic, where the houses are crowded together, a foreman could not properly supervise more than 12 men.

One mechanic was assigned to the duty of keeping the disinfection wagons, pumps, and hose in good condition. He traveled from wagon to wagon with tools, thus avoiding sending the wagon in for repairs, which were often trivial and could be made in a few minutes on the spot.

The expenditure of disinfectants was enormous; about 150,000 pounds of lime per day, and about 700 gallons of carbolic acid daily, or its equivalent in creoline, tricresol, or formalin. There was some difficulty in securing enough disinfectants to satisfy this enormous demand. The entire

stock of carbolic acid, formalin, and tiesol in the Philippine Islands was used before the end of September. Four thousand gallons of Jeyes fluid (a creolin preparation) was secured from Hongkong and Japan in time to prevent the wagons lying idle. Four of the 11 tank wagons might have lost two days on account of lack of disinfectants, but the Director of the Bureau of Science suggested that salt water could be electrolyzed, forming a disinfecting fluid, which, according to laboratory tests, would kill cholera bacilli promptly. His offer to electrolyze the solution was accepted, and for two days, four of the wagons used this fluid. In a short time all the lime in Manila and vicinity was used and the entire daily output of the kilns in the Island of Luzon was taken. The lack of lime sometimes caused the cessation of lime disinfection at 3 or 4 o'clock in the afternoon, but lime squads were equipped with shovels, hoes, rakes, brooms or other cleaning up instruments, and their spare time was utilized in digging ditches, and cleaning up the yards of premises.

Infected districts were subdivided into subdistricts; maps were made of these subdistricts, and the foreman in charge of a disinfecting wagon or lime squad was furnished with a map of his subdistrict. For example, Meisic was subdivided into 20 subdistricts and Tondo into 14.

The ordinary chemical fire engine makes an excellent disinfecting apparatus. The 80-gallon tanks are charged by CO_2 produced from bicarbonate of soda and sulphuric acid; to make an efficient disinfecting solution it is only necessary to add carbolic acid, creoline or other disinfectant to this solution. The ordinary street-sprinkling wagon is convertible into an excellent disinfecting apparatus. All that is necessary is to install an ordinary pressure pump, and several hundred feet of hose, put in the disinfectant, and fill the tank from the street hydrant. We used eleven of these wagons and four chemical engines, and they were all effective. The tank wagon possessed the advantage of being cheaper, as the cost of soda and sulphuric acid for charging the chemical engine is not inconsiderable. In Manila the cost was offset by receiving the services of the chemical engine crew free of charge.

Several kinds of disinfectants were used in the tank wagons. Crystal carbolic acid does not mix readily and requires careful handling in using it on a large scale. Formalin is good but causes a great deal of complaint from the people because of its irritating properties. Crude carbolic, in our experience, did not mix well, and from both kinds of carbolic acid, because of irregular distribution in the solution, minor accidents occurred, as burning of the hands and feet of the laborers, and killing of dogs and chickens. The most satisfactory disinfectant was Jeyes fluid, a creoline preparation which we secured from Hongkong. It is nearly foolproof and is very effective. It mixes perfectly with water, forming a milky solution of uniform strength. It does not burn the hands or

feet of the laborers or of children about the house, and no ill effects upon animals or chickens were noticed.

The simplest and most effective way to use lime is with a bucket and a ladle. The lime gang of from 15 to 25 men was handled by one white foreman and one native "capataz." Each gang was followed by a cart with lime. Each native lime thrower carried a bucket and scoop or ladle. After a little patient instruction, the natives learned to use the lime to the best advantage, to place it where it was needed, and to avoid the spots where it was unnecessary. Their instructions were definite and included liming all closets and places where fecal matter existed or was likely to be deposited.

Each chemical engine was handled by its own crew in charge of a lieutenant of the fire department.

Each tank wagon was in charge of an American foreman, who directed the disinfection, was responsible for the thoroughness of the work, and for the conduct of the six natives who manned the pump and hose.

In giving foremen their instructions, great stress was laid upon the necessity of displaying courtesy at all times. They were instructed to take part in no argument with householders or others, and to do their work with consideration for the feelings of the people, but none the less thoroughly. If actual obstructions were encountered, they were to notify the central office at once. The result of these instructions was that during the whole campaign the valid complaints were less than a dozen. All complaints were promptly investigated by the Acting Director of Health, and if found to be valid, the foreman in charge was dismissed. Only one case of actual obstruction was encountered; this man refused to permit the disinfectors to enter; he was arrested, fined ₱50, and no further trouble occurred.

The organization was mobile, and concentration of disinfecting wagons from Paco, Intramuros, and Sampaloc, as a reinforcement of Meisic and Tondo, was effected when necessary, with good results.

The general plan of campaign was as follows:

House-to-house inspection by police to discover promptly cases of cholera.

Constabulary guard upon house and inmates to prevent ingress or egress until removal of the patient and disinfection of the house.

Examination of the stools of cholera contacts to find bacilli carriers, the bacilli carriers being sent to San Lazaro Hospital for treatment.

Daily disinfection of all unsanitary closets with lime, and disinfection of ground surfaces known to be, or suspected of being, soiled with fecal matter.

An attempt was made to disinfect daily all closets in the strong-material districts, which were not flush closets or which were not kept clean. In the light-material districts the effort to disinfect the dejections of the entire population necessitated the disinfection of entire districts. It was necessary to disinfect practically the whole ground area. When one considers the enormous area to be covered daily in Tondo, Sampaloc.

Malate, and Paco, with their outlying barrios, and the fact that there are over 5,000 unsanitary closets in the Meisic district alone, the magnitude of this work may be imagined.

Two general methods of disinfecting were employed; (1) the spreading of lime, and (2) disinfection with water wagons, hose and pump, or by chemical engines, containing carbolic acid, creoline, formalin, or other disinfecting material.

Lime was effective in conjunction with drainage in the low-lying swampy nipa districts, and also for disinfecting the bad closets in the strong-material districts. The tank wagons and chemical engines were used for general disinfection of lower floors, outhouses, *patios*, stables and closets in both strong and light material districts.

Two factors, more than any others, make difficult the suppression of cholera in Manila; (1) the existence of bacilli carriers and bad closet facilities or none at all; (2) failure to find cases early.

The presence of bacilli carriers makes necessary the safe disposal or disinfection of the dejections of the entire population.

The experience of the writer in the recent epidemic points to the fact that the most important rôle in the transmission of cholera is played by the bacilli carrier.

If a bacilli carrier be a person of cleanly habits, and if he be in possession and makes use of proper closet facilities, he is practically harmless. But on the other hand, a bacilli carrier of filthy habits, who has no closet facilities, or refuses to avail himself of the public closets furnished him, is the greatest menace to the public health which can possibly exist, so far as cholera is concerned. The demonstration of the fact that over 7 per cent of apparently healthy individuals in the Meisic and Tondo districts were bacilli carriers, coupled with the unsanitary closets of Meisic district and the absence of or failure to use public closets in the nipa districts, will go far toward explaining the dissemination of cholera in Manila this year.

Every effort was made to discover promptly light cases of the disease and bacilli carriers. When a case of cholera was found, the house was quarantined until the removal of the patient and until the disinfection had been completed. The stools of the other inmates were taken for the purpose of discovering bacilli carriers. These, if found, were sent to the San Lazaro Hospital, and there detained until the vibrios disappeared from their stools. A house-to-house inspection was made of a large area, having the infected house for a center. This was done daily for five days.

The following tables show the number of apparently healthy persons examined for cholera bacilli, and how many were really carrying the bacilli:

BILIBID PRISON.

Number of persons examined	264
Number found positive	17
Percentage found positive	6.44

CITY OF MANILA.

(Exclusive of all hospitals and Bilibid Prison.)

Number of persons examined	376
Number found positive	27
Number found negative but containing vibrios other than cholera	46
Percentage found positive	7.18
Percentage found negative but containing vibrios other than cholera	12.25

Even with perfect daily disinfection of closets and places soiled with fecal matter, all chance of infection from bacilli carriers is not cut off, because a bacilli carrier with his soiled fingers may infect the food or drink of other persons.

The prohibition of certain native foods, fruits, and vegetables was necessary, not only because these substances were often infected or dangerous of themselves, but they were also the substances carelessly handled by dirty people of dirty habits, many of whom were undoubtedly bacilli carriers, and they were the substances which were eaten without sterilization by boiling or cooking after such handling.

It has been demonstrated this year that the perennial outbreaks of cholera in Bilibid Prison are probably due to bacilli carriers. Upon the appearance of cholera in Bilibid Prison, the writer gave orders that stools of those who had anything to do with the preparation or handling of food or drink be examined for cholera. Two hundred and sixty-four samples were taken and of this number of apparently healthy persons, 17 were carrying the cholera organisms in their intestines. To find out and isolate all the other bacilli carriers would have involved an amount of work in stool examinations alone which would have been impossible for the already overtaxed bacteriologists.

Results were obtained by an order from the writer to compel washing of the hands in disinfecting solution after stool and before eating. This order was enforced and cases ceased to appear, although there were doubtless many bacilli carriers among the 3,000 prisoners whose stools had not been examined.

The practice of taking stools had to be discontinued when the cases increased to such an extent that it was no longer possible to continue it. For the same reason, the house-to-house inspection of infected areas had to be supplanted by a general house-to-house inspection of the whole city when the number of infected houses, that is houses in which cholera had appeared within five days, reached 200.

Failure to find cases of cholera early makes the suppression or the disease difficult. Cases, even with the house-to-house inspection, are from two to twenty-four hours sick before discovery. Upon discovery a quarantine guard is placed upon the house and inmates, and from this point that particular focus is adequately cared for, but, in the hours before discovery other individuals probably have been infected.

When a Filipino falls ill, all the neighbors will, either through interest or curiosity, crowd into the house. Upon discovery, or upon decision of the householder or doctor to report the case, these people promptly scatter, go to their meals without washing their infected hands, eat their rice with these same infected hands, and even carry with them from the infected houses mats, articles of clothing, food and drink, to save them from the all-destroying disinfectors. Our disinfectors try to trace out these other houses to which clothing, etc., has been carried, but it is very difficult and often impossible.

To illustrate the spread of the infection in this way, the course of the disease in the Meisie District may be taken as an example. It will be observed that every four days there is a sudden increase in the number of cases. These are the persons infected from the cases of four days previous. It does not mean an incubation of four days, for these cases when found have already been sick for some time, but it would indicate an incubation of from two to three days.

Counting a house where cholera had been found within five days as a focus, on September 23 there were 241 infected foci in the city of Manila, well scattered, as is shown by the following table:

District.	Number of infected foci.
Meisie	66
Tondo	50
Sampaloc	41
Intramuros	54
Paco	21
Total	241

With the organization and the employment of the measures outlined above in twelve days the number of cases was reduced from 60, the maximum number in one day (September 20), to 5 cases on October 3. A few cases occurred daily throughout October, and these cases, in nearly every instance, came from well-known cholera areas, districts in which cholera persists after its eradication from the more cleanly and sanitary portions of the city.

For example, of the last 75 cases in October, 33½ per cent. occurred in the district bounded by Calles Bilibid and Paz on the south, Calle Mag-

dalena and San Lazaro Estero on the west, the railroad on the north, and Calle Felix Huertas on the east. This district has no surface drainage; the interiors are lower than the street gutters of Calle Cervantes, and the majority of the houses, during a great part of the year, stand over collections of filthy water, slime and muck. This office demonstrated to the city authorities the feasibility of draining this area by ditches and the drainage work is now in progress.

Nine per cent. occurred in a triangle formed by Calle Azcarraga on one side, Tondo beach on the second side, and Calle Ylaya and Calle Quesada on the third side, one of the best examples of the illegal perpetuation of the nipa shack in the strong material district.

Eight per cent. occurred on the upper end of Calle Lemery and its continuation Gagalangin, where drainage problems also remain to be solved.

Nine per cent. occurred in a small section of Meisic district, bounded by Calles Aceiteros, Santo Cristo, San Nicolas and Madrid. This district contains the filthiest and most unsanitary closets in the city of Manila.

Four per cent. occurred in the barrio of Balicbalic; other cases occurred in Palomar, in Calle Antonio Rivera, in Bancusay, and other nipa barrios. The other 20 cases were scattered and widely separated; 3 in Paco, 5 in Meisic, 5 in Sampaloc, 1 in Ermita, 1 off the Malecon Drive, 1 in Malate, and 3 in Tondo. Less than 10 per cent. were found in the strong material district, and most of these could be traced to one of the above mentioned plague spots.

Cholera is the same disease, whether encountered in Germany, Russia, Italy, Egypt, India, or the Philippines, but the measures taken to prevent its spread and to suppress the infection depend upon the geographical location of the epidemic. To suppress a cholera epidemic in a country like Germany, for example, is a comparatively simple proposition; while in the Philippines its suppression is complicated by existing conditions peculiar to these Islands.

Four things are of prime importance for the suppression of cholera: (1) A good water supply for all the people; (2) safe disposal of the dejections of the entire population; (3) prompt discovery of cholera cases, suspects, or bacilli carriers, with immediate isolation and disinfection, and (4) habits of cleanliness.

If the water supply is free from cholera and can be kept so, then the spread of the epidemic depends upon the improperly cared for stools of the persons carrying the bacilli of cholera. Flies, cockroaches, and other insects or animals having access to such stools carry the infection to food or drink. There is infection from persons who do not wash their hands and whose soiled fingers carry the infection to food or drink. There is also direct infection from actual cases of cholera.

WATER.

Manila city water has been examined daily by the Bureau of Science and the cholera bacilli have not been found therein. However, with the appearance of cholera in San Mateo and Mariquina, it was deemed prudent to place a military guard to prevent possible pollution of the river.

The new water supply, taken from higher up the gorge, will be practically safe from contamination by human excrement.

The great trouble with the Manila water supply is that it does not reach all the people. Some barrios are at a great distance from the nearest hydrants, and they must carry, or pay for carrying, a long distance. As a result, they use the water from shallow wells, ponds, *esteros*, or other questionable sources, for washing clothes, kitchen utensils, and also in many instances for drinking purposes.

It was deemed necessary to close all wells, except a few in the more distant barrios, which were treated with permanganate of potash. Besides closing wells, wherever possible all stagnant places were drained by digging ditches and certain small, infected *esteros* were patrolled by the Constabulary to prevent the people using the water.

DISPOSAL OF THE HUMAN EXCREMENT.

The new sewer system is another sanitary improvement anxiously awaited. The existence in Meisic district of thousands of tight vaults and filthy closets is responsible in a great measure for the spread of cholera in that district and the difficulty experienced in eradicating the disease. These filthy closets and tight vaults can be replaced by modern flush closets connected with the new sewer system. In the newer residence districts, septic vaults and absorbing basins are used as receivers of sewage from modern flush closets. It will be an improvement when all vaults, however satisfactory in construction, are no longer necessary, because of the installation of the new system.

In the nipa districts, the people depend upon the sparsely scattered public closets or have no closet facilities whatever. In the latter instance, the fecal matter is deposited in the most convenient place; in the long grass, in the estero, in pools or gutters, or under the house. The family pig takes care of a considerable quantity of human excreta and garbage.

There are large *barrios* within the limits of the city of Manila where the only way of entrance is a path too narrow to permit a wagon to pass. These, of course, have no garbage-collection or closet facilities.

Habits of cleanliness are best secured by a campaign of popular education. Excluding the water supply and the disposal of feces, the other factors in spreading infection can be nullified by the inculcation of cleanly habits. If the bacilli carrier washed his hands often enough and at the

proper times he would not transfer infection from his dirty fingers to the food or drink of others. If the kindly native neighbors who assist those sick with cholera, and who disappear before the arrival of the health-officers, can be taught the necessity of washing their hands before eating or handling food, many more cases will be prevented.

The Bureau of Health has printed cholera circulars in Spanish, English, and all the native dialects, telling how to protect one's self and others against the infection of cholera. This campaign is best conducted in the schoolroom and from the pulpit. The Bureau of Education and the Roman Catholic Church have coöperated in an attempt to spread the knowledge and advice contained in the cholera circulars among the people. Efforts along this line have met with success but it requires a long time to completely change the habits of a people and it will probably require another generation to complete the work.

The writer has made, in his report to the honorable the Secretary of the Interior, the following recommendations, calculated to prevent the recurrence of cholera in epidemic form in Manila. The difficulties which attend the carrying out of these projects are recognized as well nigh insuperable, but they are not impossible ideals, and an attempt to realize these ideals should be the policy of the Bureau.

The Manila city water supply must be extended to every part of the city and placed within easy reach of everyone.

Tanks and reservoirs must be so constructed as to preclude the possibility of contamination.

Esteros must be controlled and confined to definite beds either by adequate walls or by dredging so that any overflow land will be drained between tides.

The filling in of low places, which can not be drained, to the proper height above the curb is essential.

Public closets must be established in all *barrios*, so that every inhabitant of the city of Manila will have closet facilities at his disposal. It is advisable to have more closets even if of less seating capacity; six closets of six pails each will be of more value than three of twelve pails each, for the reason that the native has a shorter distance to travel. Also, the cutting of alleys through the back yards will facilitate his journey to the closet.

Before permitting land to be used for building purposes within the city limits, the land should be subdivided by streets and alleys upon a definite plan. The indiscriminate building of nipa shacks upon the interior of a block without order or regard for necessary intervening spaces should not be permitted. Streets and alleys should be cut through already existing collections of nipa shacks and when necessary houses removed to permit proper spacing. Streets must be opened into barrios

within the city limits which are now isolated, and have no wagon roads entering them to permit the collection of garbage and refuse.

A sufficient force of sanitary police must be employed to enforce the use and sanitary maintenance of closets.

All wells must be filled in.

More stringent measures to compel the prompt reporting of suspicious cases must be adopted, with severe penalties for infractions of this ordinance.

Stricter enforcement of the building code in the erection of new buildings is necessary.

Nipa shacks in the strong-material districts must go, and repairs to old nipa shacks, which perpetuate this problem, must be prevented. These nipa districts exist by sufferance within the strong-material districts; dilapidated shacks crowded together in the most unsanitary manner, where there are excellent public closets, patronized only by a select few. The majority still find it easier to deposit or throw their dejections upon the swampy ground. These districts are the natural homes of cholera, and from there the people who are trying to live decently are infected by means of *muchachos*, cooks, or *cocheros*, who spend their spare time in these plague spots.

A proper system of surface drainage for every part of the city of Manila, where such drainage is lacking, but especially for (1) the San Lazaro Estate and that portion of the city from the San Lazaro Estate to the railroad crossing on both sides of Calle Cervantes, (2) Santa Monica, (3) Antonio Rivera, (4) Palomar and Magdalena *interior*, (5) that portion of Tondo north of Moriones and west of Estero de la Reina, and (6) that part of Malate district, bounded by Herran, Wright, San Andres, and Nueva.

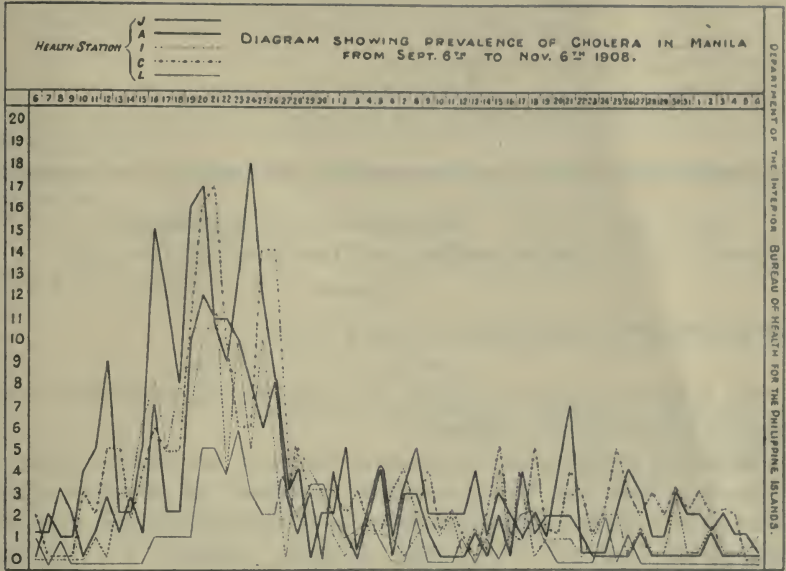


EXHIBIT C.

SUPPLEMENTARY REPORT UPON THE CHOLERA EPIDEMIC OF 1908 IN MANILA.

DEPARTMENT OF THE INTERIOR,
BUREAU OF HEALTH, OFFICE OF THE DIRECTOR,
Manila, P. I., November 13, 1908.

The Honorable the SECRETARY OF THE INTERIOR,
Manila.

SIR: I have the honor to make the following supplementary report upon the recent cholera outbreak.

Cholera in epidemic form was suppressed in twenty-three days, or twelve days from the day upon which it reached its maximum, but a few cases of cholera continued to occur in certain well-defined areas, and constant employment of the most energetic measures was necessary throughout the month of October to prevent the infection from again assuming epidemic proportions.

The persistence of cholera after the epidemic had been suppressed was due to the unsanitary conditions of certain districts, and to the apathy, and in some instances, the passive opposition displayed in the past by the municipal authorities of the city of Manila toward recommendations for improvement of these unsanitary conditions. These shortcomings of the Municipal Board may be summarized under the following heads:

1. Failure to furnish sufficient number of public closets.
2. Failure to supply city water to the barrios.
3. Failure to drain unsanitary areas by cleaning the esteros and providing adequate street drainage.
4. Failure to enforce building ordinances.

FAILURE TO FURNISH A SUFFICIENT NUMBER OF PUBLIC CLOSETS.

In substantiation of the above the following table is appended, the installations being requested of the Municipal Board on the dates mentioned:

Date.	Number requested.	Number installed.*
May 15, 1906.....	32	0
September 27, 1907.....	1	2
October 23, 1907.....	5	5
May 4, 1908.....	2	0
May 29, 1908.....	38	-----

* About 20 were appropriated for but had not been installed when cholera had reached epidemic proportions.

As a sample of the attention which communications from this office have received, the following correspondence in regard to the request for two pail sheds made on January 24, 1908, is cited.

STATION C, TONDO, *January 24, 1908.*

SANITARY ENGINEER, BUREAU OF HEALTH.

SIR: I have the honor to recommend that public closets be constructed at the following places:

In rear of the public market on Calle Gagalangin, and at No. 295 interior Calle Gagalangin.

Very respectfully,

W. A. CHRISTENSEN,
Medical Inspector, Bureau of Health.

MANILA, P. I., *February 8, 1908.*

[First indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,

Manila, P. I., February 8, 1908.

Respectfully referred, through the Municipal Board, city of Manila, to the city engineer with the information that the locations for public closets recommended by Medical Inspector W. A. Christensen, meet the approval of this office.

Attention is invited to a previous communication signed by some 27 petitioners dealing with this matter and forwarded by the undersigned to the Municipal Board on September 27, 1907.

VICTOR G. HEISER, *Director of Health.*

No reply to this letter was received.

Under date of August 7, 1908, the undersigned received a petition forwarded by the Secretary of the Municipal Board, in which the residents petitioned for the very closet previously recommended as per above communications by this office, it appearing from the inclosed correspondence that the letter of January 24 had been filed and forgotten.

MANILA, I. F., *22 de Julio de 1908.*

Hon. FELIX M. ROXAS,

Alcalde de la Ciudad de Manila, I. F.

HONORABLE SEÑOR: Los que suscriben, vecinos todos al rededor del Mercado público del barrio de Gagalangin, Tondo, á su honorabilidad con el debido respeto se presentan y exponen:

1. Que en el barrio de Gagalangin, y á raiz de una petición hecha por algunos vecinos del mismo barrio, se han instalado dos escusados públicos situados en ambos extremos de la calle Real de Gagalangin.

2. Que estos dos escusados son distantes uno y otro del lugar donde está situado dicho mercado, y por tal motivo les hace imposible acudir á los mismos los que viven en el centro ó sea al rededor del citado mercado, especialmente en esta época de aguas.

3. Que todos los recurrentes son pobres y carecen de recursos para costear cubetas en sus propias casitas.

4. Que los recurrentes creen que el mercado público, es el más concurrido por ser de donde surte la vecindad efectos de primera necesidad y por tanto es el más llamado y conveniente tener al lado del mismo un escusado público como en los demás mercados de esta capital.

5. Por las razones expuestas; suplican á su honor, tenga á bien decretar á que en el lugar adecuado para el caso, ó sea al lado mismo del mercado público de Gagalangin, se instale un escusado público; pues obrando así, quedarían beneficiados tantos los recurrentes como sus familias en particular y el público en general.

Honorable señor,

Firmados: Ramon del Rosario, Gagalangin 214. Matias Sobritchea, Gagalangin 215. Justa Tabora, V. Muyot, Catalina Muyot, Ambrocio Santos, Sabina de Leon, V. Garcia, Narciso Garcia, Deogracias Sanvutores, S. del Rosario, Silvina Ysidoro, Canuto Peña, Doroteo Aguilar, Dora Raquindan, Francisco Santos, J. Haru, Eladio Santiago, Patricio Gonzalez, Pedro Gonzaga, Ladislao Lucas, Canuto Sacramento, Teofilo Domingues, Antito Tabora.

[First indorsement.]

CITY OF MANILA, MUNICIPAL BOARD,
OFFICE OF THE SECRETARY,

August 7, 1908.

Respectfully referred to the Director of Health, in connection with the papers relating to midden sheds sent him on August 4, 1908.

By direction of the Board:

H. L. FISCHER, *Secretary.*

[Second indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, P. I., August 7, 1908.

Respectfully returned to the Municipal Board inviting attention to a communication from this office dated February 8, 1908 (copy inclosed). This market site was not included in the more recent communication of May 29, 1908, as it was hoped that the Board still had the matter under advisement.

The site being a public market, it is doubly important that it be supplied with closet facilities.

A. J. McLAUGHLIN,
Acting Director of Health.

Supplementary to the above, attention is invited to the fact that the letter of January 24 is a request for the installation of a public closet in one of the municipal markets.

Failure to supply city water to the barrios.

Date requested, May 15, 1906.

Number of hydrants requested 21

Number installed 3

Date installed, 1906 and 1907.

FAILURE TO DRAIN UNSANITARY AREAS.

The city, at present, due to lack of street drainage, and to filthy esteros, is suffering from the unsanitary conditions thus naturally created. The Bureau has made every effort to present conditions as they actually exist to the Board, but very little notice has, to date, been given to communications sent.

As a fair sample of the attention which communications have received, a copy of the following letter, with its indorsements, is respectfully submitted:

JUNE 5, 1907.

The CITY ENGINEER, *Manila, P. I.*

SIR: I have the honor to invite your attention to the present low, unsanitary condition of Calle Limasana off Calle San Sebastian, Quiapo.

It is desired by this office to issue sanitary orders against certain houses in the rear of Calle San Sebastian but until the above-mentioned street is raised and guttered down as far as the estero to the rear, it will be difficult for the owners to have anything definite to work to. The estero already mentioned, is also in a very unsanitary condition, and should be dredged or filled in, in some manner, it being at present more of a menace to the health of the community than the houses surrounding it.

Hoping that you may have this locality examined with a view to alleviating the conditions, I am,

Very respectfully,

GEO. H. GUERDRUM,
Acting Chief, Division of Sanitary Engineering.

CITY OF MANILA,
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,
OFFICE OF CITY ENGINEER,
June 6, 1907.

MR. GEORGE H. GUERDRUM,

Chief, Sanitary Engineering Division, Bureau of Health, Manila.

SIR: In reply to your letter of June 5, I have the honor to state that Calle Limasana does not extend to the estero of which you speak, and this office knows of no law which gives us the right, even should we so desire, to fill private lands at public expense.

Very respectfully,

W. P. WYLIE,
Acting City Engineer.

The above curt reply clearly portrays the attitude of at least one municipal official.

Calle Limasana is a public street. The estero mentioned is a public waterway. The incidental feature that Calle Limasana does not extend quite to the estero is dilated upon, while the important fact that the calle and the estero are in need of attention from the municipal authorities is ignored.

The matter, however, was allowed to rest only temporarily, when the question was again taken up, as shown by the copies of the communications given below.

OCTOBER 10, 1907.

The DIRECTOR OF HEALTH, *Manila, P. I.*

SIR: In accordance with the provisions of Chapter XXII of the Sanitary Code, I have the honor to invite attention to the unsanitary condition of the small estero in the rear of Calle San Sebastian and Calle Limasana. Due to the fact that the stream is now practically filled with stagnant wastes from various sources, the water level has been raised to such an extent that it is nearly impossible to secure proper drainage for the adjoining houses.

It is respectfully requested that the honorable Municipal Board or the city

engineer be notified of the condition, with the request that steps be taken toward the alleviation of the condition now existing by dredging and deepening the stream, and if possible protecting the banks from further washing into the river.

Very respectfully,

GEO. H. GUERDRUM,
Chief, Division of Sanitary Engineering.

[First indorsement.]

BUREAU OF HEALTH,
Manila, P. I., October 10, 1907.

Respectfully forwarded to the Municipal Board, city of Manila, inviting attention to within communication.

VICTOR G. HEISER, *Director of Health.*

[Second indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,
October 12, 1907.

Respectfully forwarded to the city engineer, for investigation and report.
By direction of the Board:

JNO. M. TUTHER, *Secretary.*

[Third indorsement.]

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,
OFFICE OF THE CITY ENGINEER,
Manila, January 7, 1908.

Respectfully returned to the Secretary of the Municipal Board, with the information that the estero has been cleaned as far as possible, and is being gradually filled in with street refuse and sweepings by the department of sanitation and transportation, and the sanitary conditions are improved.

W. P. WYLE, *City Engineer.*

[Fourth indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,
January 8, 1908.

Respectfully returned to the Director of Health, inviting attention to the preceding indorsement.

By direction of the Board:

G. S. LANE, *Acting Secretary.*

[Fifth indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, P. I., January 28, 1908.

Respectfully returned through the Municipal Board to the city engineer, with the information that upon reinspection it would appear that Mr. Guerdrum's letter and the indorsement of the city engineer did not refer to the same estero.

There is a street gutter along the north side of Calle Limasana which receives the drainage from four or five houses and stops at a distance of about 50 meters from the estero. From the end of the gutter the drainage flows in a small stream to the estero in question, across the property of Doña Rosa Roxas. To fill in the estero in question would make it necessary to change the grade of the gutter referred to above, so that its contents would go off through Calle San Sebastian.

VICTOR G. HEISER, *Director of Health.*

BAGUIO, BENGUET, *May 7, 1908.*The SECRETARY, MUNICIPAL BOARD, *Manila.*

SIR: I have the honor to invite attention to a communication from this office, forwarded to the Municipal Board on October 10, 1907, in which it is requested that an estero in the rear of Calle San Sebastian near the end of Calle Limasana be cleaned or dredged.

Under date of January 7 in an indorsement to the letter the city engineer stated that the sanitary conditions had been improved, in that the stream in question was gradually being filled with street refuse, sweepings, etc.

The undersigned under date of January 28, 1908, returned the communication to the city engineer through the office of the Municipal Board with a statement to the effect that the city engineer and the sanitary engineer were probably referring to different esteros.

No reply has been received in regard to this communication although more than three months have elapsed since the date last mentioned.

Supplementary to previous communication it is desired to explain that this office is not desirous of having the stream filled up, as it is now the natural drainage for considerable territory between Calzada de Iris and Calle San Sebastian, and moreover is navigable for lumber rafts and small boats up to just below the territory complained of. What this office does desire is that the stream be cleaned of all filth and accumulated silt and if possible that it be deepened and widened, so that the adjacent land may be allowed to drain itself between tides. This communication applies also to the various ramifications of the estero which are included between the Estero de Quiapo, Calzada de Iris, Calle Juan de Juanes, Bilibid Viejo, San Sebastian and Mendoza.

Notification as to what action the Board intends to take in the matter is respectfully requested.

Very respectfully,

VICTOR G. HEISER, *Director of Health.*

JUNE 4, 1908.

The SECRETARY, MUNICIPAL BOARD, *Manila.*

SIR: I have the honor to advise that this office has to date received no reply to a communication dated May 7, 1908, dealing with a request for the cleaning and dredging of certain esteros contained within the territory bounded by the streets of Mendoza, San Sebastian, Bilibid Viejo, Juan de Juanes, Calzada de Iris, and the Estero de Quiapo.

Information as to any proposed action on the subject by the Municipal Board is requested.

Very respectfully,

VICTOR G. HEISER, *Director of Health.*

It seemed hopeless to expect even the courtesy of a reply in the face of the attitude assumed by the Municipal Board, and the matter was temporarily abandoned.

A copy of another letter dealing with the drainage of another estero is also submitted, the various indorsements being self-explanatory.

OCTOBER 10, 1907.

The DIRECTOR OF HEALTH. *Manila.*

SIR: I have the honor to invite your attention to the unsanitary condition of a small stream heading near Calle Vergara between Calles Balmes and Alejandro Farnesio in the district of Tanduay. Due to the fact that the stream is now practically filled with stagnant wastes from various sources, the water level has

been raised to such an extent that it is nearly impossible to secure proper drainage for the adjoining houses.

It is respectfully requested that the honorable Municipal Board or the city engineer be notified of the condition, with the request that steps be taken toward alleviation of the conditions now existing by dredging and deepening the stream and if possible protecting the banks from further washing into the river.

Very respectfully,

GEO. H. GUERDRUM,
Chief, Division of Sanitary Engineering.

[First indorsement.]

BUREAU OF HEALTH,
Manila, P. I., October 10, 1907.

Respectfully forwarded to the Municipal Board, city of Manila.

VICTOR G. HEISER, *Director of Health.*

BAGUIO, BENGUET, May 7, 1908.

The SECRETARY, MUNICIPAL BOARD, *Manila.*

SIR: I have the honor to invite attention to a communication from this office dated October 10, 1907, in which it was requested that an estero located between Calles Balmes and Alejandro Farnesio, Tanduay, be cleaned and deepened, with reference to which this office has to date received no reply.

It is respectfully requested that the undersigned be notified as to what action has been or will be taken in the matter.

Very respectfully,

VICTOR G. HEISER,
Director of Health.

Other correspondence is submitted.

JUNE 6, 1908.

The MUNICIPAL BOARD, CITY OF MANILA.

GENTLEMEN: I have the honor to request that an examination of the unsanitary conditions existing at the corner of Calles Lepanto and Iris, Sampaloc, due to the lack of street gutters be made under the direction of the Board, with a view to the construction of cement gutters for the locality.

Very respectfully,

VICTOR G. HEISER,
Director of Health.

JUNE 12, 1908.

The DIRECTOR OF HEALTH, *Manila.*

SIR: In reply to your communication of June 6, 1908, calling attention to unsanitary conditions at the corner of Calles Lepanto and Iris, Sampaloc, and requesting that cement gutters be constructed in this locality, I have the honor to inform you that this matter has already been taken up by the Board and a liberal provision for gutters for drainage purposes made in the estimates for the coming fiscal year.

In this connection I desire to invite your attention to the fact that it would be a useless waste of money for the city to undertake to remedy such conditions in certain particular places without reference to a general scheme for the improvement on the drainage for the whole city, and the question for the drainage of the whole city has been thoroughly worked out and plans about completed. It is, however, such a gigantic undertaking that funds are not available to carry out the whole scheme at once and it will * * * therefore, be necessary to proceed slowly.

Very respectfully,

G. S. LANE, *Acting Secretary.*

[First indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, P. I., June 13, 1908.

Respectfully returned to the acting secretary, Municipal Board, requesting that this office be furnished with the general scheme for the drainage of the whole city, and more particularly the section of the city in question, in order that duplicate recommendations may not occur in the future.

In this connection, information is respectfully requested as to whether the views expressed in the within letter are those of the acting secretary or those of the Municipal Board.

VICTOR G. HEISER, *Director of Health.*

[Second indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,
June 17, 1908.

Respectfully returned to the Director of Health.

Major Case, chief engineer, department of sewer and waterworks construction, informs me that the plan for the drainage of the city, spoken of in my letter, will be ready to submit to the Municipal Board for approval probably within two months. When same has been approved by the Board, a copy will be furnished the Bureau of Health.

In reply to the second paragraph of the first indorsement hereon, I have the honor to inform you that the views expressed in the within letter are the views of the Municipal Board and not necessarily of the acting secretary.

By direction of the Board:

G. S. LANE, *Acting Secretary.*

[Third indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,
Manila, P. I., June 19, 1908.

Respectfully returned to the Municipal Board with the suggestion that the condition of this corner constitutes a local nuisance which could probably be remedied without waiting for the general storm water sewerage system, which it is believed can not be put into operation for several years yet to come.

VICTOR G. HEISER, *Director of Health.*

It would seem the height of folly to permit these unsanitary conditions to exist pending installation of the general storm water sewerage system, which probably will not be installed for years. In the meantime, whole areas without street drainage, constituting a direct menace to the public health and one of the undoubted causes of the persistence of cholera, are permitted to exist when the conditions could have been corrected at small cost by temporary drains, as is at present being demonstrated by this Bureau upon the San Lazaro Estate.

A recent example of the class of replies received is appended:

JUNE 9, 1908.

THE MUNICIPAL BOARD, MANILA.

GENTLEMEN: I have the honor to advise that the attention of this office has been called to the unsanitary condition of Calle Lavanderos, Sampaloc.

There are no gutters to this street, while the road surface is low, muddy and insufficiently metalled.

It is respectfully requested that an examination of the locality be made under the direction of the board and that steps be taken to correct the existing conditions.

Very respectfully,

VICTOR G. HEISER, *Director of Health.*

JUNE 12, 1908.

The DIRECTOR OF HEALTH, *Manila.*

SIR: In reply to your communication of June 9, 1908, calling attention to the condition of Calle Lavanderos, Sampaloc, I have the honor to inform you that this matter has already been considered by the city engineer and the conditor. will be remedied as much as possible and as soon as possible.

Very respectfully,

G. S. LANE, *Acting Secretary.*

SAN LAZARO ESTATE.

The notoriously unsanitary condition of the San Lazaro Estate has repeatedly been brought to the attention of the Municipal Board as the following correspondence shows:

AUGUST 20, 1907.

The DIRECTOR OF HEALTH, *Manila, P. I.*

SIR: I have the honor to submit herewith a report on the unsanitary condition, due to the lack of drainage, in the thickly populated portions of the San Lazaro Estate, the conditions being as follows:

1. The streets have very little, if any, drainage, either longitudinally or transversely.

2. There are no side drains to the streets, if there were any at one time, they have become completely obliterated.

3. The entire *barrio* is practically without drainage facilities of any sort. To prevent the place from becoming a menace to the health of the city the following statement of improvements needed is respectfully submitted:

1. A comprehensive system of paved or cemented street drains is essential. They should be below the level of the street (which may necessitate the elevation of the street grades) and built on systematic lines, on properly determined grades.

2. The ground surface of every house should be at a higher elevation than that of the adjacent canal and all water from the houses should drain therein.

3. The ground beneath every kitchen or place where foul water may be thrown or allowed to collect should be cemented, with an incline to the street or yard canal; all subsidiary canals to be connected with the street canal with a grade of not less than one in fifty.

Until the first recommendation, has been complied with it is believed that it will be useless to attempt even temporary relief by endeavoring to comply with paragraphs 2 and 3.

Very respectfully,

GEO. H. GUERDRUM,
Chief, Division of Sanitary Engineering.

[First indorsement.]

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH,

Manila, P. I., August 21, 1907.

Respectfully forwarded to the Municipal Board for its information.

The undersigned understands that there is some question at the present time as to who should pay for new streets and sewers on the San Lazaro Estate, and

that no large amount of money is available for this purpose, yet, at the same time this matter should receive consideration to the end that a systematic plan be followed providing for better sanitary conditions.

VICTOR G. HEISER, *Director of Health.*

No reply to the above was received.

On April 28 the following letter was forwarded:

APRIL 28, 1908.

The CITY ENGINEER, *Manila.*

SIR: I have the honor to again invite attention to the lack of gutters and general drainage facilities on the San Lazaro Estate.

It is now in the middle of the dry season but stagnant pools of mosquito and disease breeding liquid wastes are even now scattered throughout the area in question. In the strong material section many of the tenants have done everything that could be reasonably requested of them in the way of constructing vaults, absorbing basins, etc., the effluent of which can not be properly taken care of, due to lack of both surface and under ground drains. In other cases the street grades have been raised to such an extent that they surround the block, converting what was once fairly well drained land into an offensive marsh, rendering useless any local attempts at drainage by tenants.

These tenants pay high rents and receive very little benefit therefrom. The fact that the place is in as fair a condition as it now is, is due largely to the natural excellence of the land for building purposes and to the rigid requirements of the administrator in regard to building operations, etc. The requirements are, however, largely at the expense of the tenants and it is hoped that means can be found by which the Government, as owner of the estate can do its share toward making the necessary improvements.

Special attention is invited to the present condition of Calles Mayhaligue, Zurbarán, and Oroquieta, these streets being adjacent to the main thoroughfare of Calle Cervantes.

Very respectfully,

VICTOR G. HEISER, *Director of Health.*

FAILURE TO INFORCE BUILDING ORDINANCES.

Reports have already been made on this general subject. The previous reports cover the general condition of certain buildings, erected under permit at the following places: Palomar, Tondo; 87 interior Aceiteros, San Nicolas; 104 interior Aceiteros, San Nicolas; 104 interior Concepción, Ermita; the Grand Opera House, Calle Cervantes.

In addition may be mentioned a two story house at the corner of Calles Diaz and Luzon, Magdalena. Permit was granted for a one-story structure but in the completed building the lower part is made use of in spite of the fact that there is head room of less than 2 meters, the Building Code stating specifically that no room must be less than 3 meters in height.

Building permit No. 1570; approved, December 28, 1907.

The struggles of this office with the nipa-shack problem, in the hard-material part of the city may be illustrated by submitting the following.

During the months of December, January and February, 1907 and 1908, this office, assisted by the Manila Railway Co., succeeded in having numerous shacks removed from the property facing on Santa Monica

and situated between that street and the estero de la Reina. It was found, however, that a number of the people had merely removed their shacks across the estero and in defiance of building ordinances had erected their huts at the interior of 658 Lemery, Tondo.

The following correspondence ensued, after many other vexations delays had occurred.

STATION C, TONDO BOARD OF HEALTH,

June 18, 1908.

Lista de las personas que han sido multadas por el Juzgado Municipal por reparar sus casas de nipa en la zona de materiales fuertes, los cuales viven en la Calle Lemery, No. 658 interior, Tondo, las siguientes:

Nombres.	Multas impuestas.
Simeon Muñoz	P2.00
Ciriaco Molina	5.00
Petronila Garcia	.20
Fausta de la Cruz	.20
Maxima de la Cruz	.20
Francisca Andres	.20
Dorotea Fulgencio	.20

A twenty-cent fine makes a very cheap building permit.

JUNE 10, 1908.

The MUNICIPAL BOARD, CITY OF MANILA.

GENTLEMEN: I have the honor to invite attention to the following data:

As a result of the correspondence entered between this office and the Manila Railroad Company, during the months of November, December, and January last, the plat of land known as lot No. 2 of block 15, situated on Calle Santa Monica, Tondo, was cleared of numerous unsanitary shacks and carabao stables. In vacating this land, however, a number of the people moved their huts to the other side of the Canal de la Reina where they now are (interior of 658 Lemery).

Such being the case, this Bureau again commenced action against these squatters, and during the early part of March orders were issued to have these places vacated.

On May 17 a letter was received from Dr. Dominador Gomez requesting an extension of time for these people to vacate, which extension was granted, to expire June 1, 1908.

Instead of vacating, however, a further verbal request was received from the tenants, presumably on the recommendation of Dr. Gomez, that the orders be held in abeyance or revoked.

In view of the fact that these light-material structures have been erected in a strong-material district, it would appear that this is already a violation of section 79 and 80 as well as of section 54 of Ordinance 78, and if the necessary steps are taken by the Municipal Board no further action by this Bureau will be required.

In this way, the unsanitary condition will be corrected and protection against fire secured at the same time.

Very respectfully,

VICTOR G. HEISER, *Director of Health.*

[First indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,

June 12, 1908.

Respectfully referred to the city engineer, for recommendation.

By direction of the Board:

G. S. LANE, *Acting Secretary.*

[Second indorsement.]

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS,

OFFICE OF THE CITY ENGINEER,

Manila, June 16, 1908.

Respectfully returned to the secretary of the Municipal Board with the following report:

Of all the shacks cleared away from the Santa Monica property, only four (4) were removed to the site under discussion (interior of 568 Lemery). All the rest of the houses on the property of Mr. Perez have been there for some years. As to their sanitary condition, the Board ascertained their condition on its visit last month. The four shacks recently moved to this site are situated in the southeast corner of the property, and practically surrounded by a swamp. It is true that the owners can be prosecuted under section 54, Ordinance 78, but as the Board of Health has already taken action, I believe it would be well to leave the matter to their prosecution. The great majority of the orders issued by the Board of Health against these premises were directed against persons who have lived there in the same houses for four or five years; some of them for a longer period. In these cases, I think the Board has no jurisdiction whatever; certainly not under sections 78 and 80, as these buildings were in existence prior to the passing of the ordinance, and would therefore recommend that the matter be left to the Board of Health entirely.

W. P. WYLIE, *City Engineer.*

[Third indorsement.]

CITY OF MANILA, MUNICIPAL BOARD, SECRETARY'S OFFICE,

Manila, June 17, 1908.

Respectfully returned to the Director of Health, inviting attention to the second indorsement hereon, the recommendations in which have been adopted by the Board.

By direction of the Board:

G. S. LANE, *Acting Secretary.*

MANILA, *June 19, 1908.*

Dr. HEISER:

SIR: In regard to the illegal erection of houses at the interior of 658 Calle Lemery, Tondo, I have the honor to report that sanitary orders to vacate their houses were issued to the following persons:

Simeon Muñoz: On April 30, 1908, he was fined ₱2 in the municipal court for erecting a house in violation of Ordinance 78. The material for this house he secured by purchasing one of the vacated houses on the Manila Railway property on the other side of the estero.

Nicolas Pijate, married to Ciriaco Molina who was fined ₡5 in the municipal court for erecting a house in violation of Ordinance 78.

Francisca Andres: Was removed from other side of estero. Was recently fined ₡0.20 in the municipal court for constructing a light-material house in violation of building ordinance.

Dorotea Folgencia: She and her mother were removed from the other side of the estero. Dorotea was recently fined ₡0.20 in the municipal court for erecting a light-material house in violation of building ordinance.

Martina Santiago: Was removed from the other side of estero. Has now moved her house to the interior of Calle Lemery in violation of building ordinance.

Petrona Garcia: Fined ₡0.20 in the municipal court for erecting a house in violation of Ordinance 78.

Victoria de la Cruz: Victoria lived in a rented house on the other side of the estero, and when this was vacated by a sanitary order, she purchased same and erected the house at interior of 658 Calle Lemery.

Modista Narciso: Was removed from the other side. Was recently stopped by Bureau of Health sanitary inspector from completing her house at interior Lemery and is now living in an adjacent old house.

Fausta de la Cruz: Lived on other side of estero railway property. Was recently fined in the municipal court ₡0.20 for constructing a light-material house in violation of building ordinance.

Maxima de la Cruz: Lived on other side of estero; has constructed a light-material house at interior Calle Lemery in violation of building ordinance.

Francisco Javier: Has erected a new light-material addition to his house in violation of Building Code.

Felis Valiente: Lived on the railway property other side of estero and has constructed a new light-material house at interior of Calle Lemery in violation of building ordinance.

Filomeno de la Cruz: Engaged in making illegal addition to his house.

Candelaria Enriquez: Recently constructed an illegal light-material addition to a light-material house.

The above detailed information was secured by the undersigned, accompanied by two sanitary inspectors, by personal interrogation of the several people at their houses.

In addition to the above, additional illegal erections have been noted at interior of 108 Moriones; this property is reported to belong to Sr. Ricardo Aguado, member of the Advisory Board, and is within the limits of the district reserved for strong-material construction. These cases are as follows:

Ruperto Funda: Was removed from the railroad property on the other side of the estero. On April 30, 1908, he was fined ₡2 in the municipal court for constructing a light-material house at 108 Moriones in violation of building ordinance.

Marguerito Pajardo: Was removed from the railroad property on the other side of the estero. Has recently erected a light-material house.

Julia Ronquillo: Was removed from the railroad property on the other side of the estero. Has recently erected a light-material house.

Respectfully submitted.

GEO. H. GUERDRUM,
Chief, Division of Sanitary Engineering.

The importance of the work is shown by the following newspaper clipping:

"HAMPER WORK OF SANITATION—PETTY POLITICIANS PROTECTING SQUATTERS AGAINST CITY ORDINANCES.

"The sanitary engineer of the Bureau of Health has been having great trouble in removing squatters from little *barrios* just out of sight of the main highway, because they are protected by the petty politicians in the city.

"Yesterday several of these squatters were on trial in the municipal court for breaking the health ordinances by erecting shacks in the interior of 658 Calle Lemery, Tondo, and while the court was in session one of them was taken ill with cholera and carried to San Lazaro. The court room was thoroughly disinfected, and inspectors were sent to disinfect the house at Calle Lemery. In the afternoon two more of the residents of these shacks were removed to San Lazaro suffering from cholera * * *."

It became apparent that the Municipal Government was desirous of limiting the authority of the Bureau of Health to such an extent as to make it largely noneffective. This was manifested by its repeal of an important section of the Building Code (sec. 142) dealing with light and ventilation of buildings, on August 23, 1907, without previous consultation with this office.

A more decided step was, however, taken by the Municipal Board on September 10, 1907, when the following resolution was adopted by it, all members voting "aye" with the exception of Mr. Hastings, who voted "no":

"Resolved, That it is the sense of the Board that the interpretation of all building ordinances is the exclusive function of the Municipal Board."

In view of the provisions of Act No. 1150, particularly section 12(a), and even more particularly section 6, reading respectively as per below, the Bureau of Health has never recognized the validity of the resolution.

"SEC. 12 (a). The sanitary engineer shall inspect buildings, plumbing, water-works, drainage, and sewer systems, streams, and esteros within the limits of the city of Manila, reporting the results of such inspection to the Board of Health, and at the request of the Board of Health shall submit plans and estimates of the cost of remedying unsanitary conditions discovered by him. He shall further, at the request of the Board of Health, prepare and submit to the Board plans and estimates of the cost of improving the general sanitary condition of unhealthy districts in Manila, and shall perform such other sanitary engineering work in the city of Manila for the Board of Health as the Board may direct."

"SEC. 6. * * * The city engineer of Manila or his duly authorized agent shall inspect and supervise the construction, repair, removal, and safety of buildings and premises and the ventilation, drainage, and plumbing: *And provided further*, That the Board of Health shall have power to make inspections through its duly authorized agents in order to ascertain whether such ordinances are being enforced, and to initiate complaints against violators of such ordinances after consultation with the city engineer."

The adoption of the resolution is thus mentioned in detail in order to illustrate the very great difficulties under which this Bureau has labored in its endeavor to comply with the very clearly expressed provisions of one of the acts of the Commission, and the municipal ordinances.

Having arrogated unto itself the exclusive interpretation of the Building Code, the Municipal Board has, nevertheless, failed to prevent the illegal construction and repair in the strong-material district, while in other cases it has allowed the erection of buildings under permit at direct variance with the building ordinances. By its adoption of the above letter of the city engineer, it is endeavoring to force this Bureau to undertake the necessary task of controlling the erection of unlicensed nipa shacks in the strong-material part of the city.

Respectfully,

A. J. McLAUGHLIN,
Acting Director of Health.

EXHIBIT D.

INDICATIONS FOR TREATMENT IN ASIATIC CHOLERA.

[By Richard P. Strong, Chief of the Biological Laboratory.]

I shall limit my remarks more particularly to the indications for treatment in cholera and shall leave the details of the treatment, with the various drugs to be employed, dosage, etc., for others to discuss.

In a typical case of Asiatic cholera, it is always possible to distinguish certain well-marked stages of the disease in which the clinical features vary greatly. Thus in a large number of instances a premonitory or incubative stage can be recognized, followed by a stage of evacuation in which purging, vomiting and muscular cramps are the most prominent symptoms. This condition is superseded by one of collapse and should the patient survive longer, a period of reaction takes place in which a rise of temperature occurs and if no complications supervene the case may end in recovery.

For this reason it is convenient to discuss the treatment of cholera separately for each of these clinical stages; however, bearing in mind that throughout the course of the disease the treatment should be symptomatic. In the first stage, namely the incubative one, in which diarrhœa is the most definite and common symptom, almost all authorities now agree that an attempt should be made to check this premonitory looseness of the bowels. It was formerly asserted that if the diarrhœa was arrested and the intestine set at rest, for example by some form of opium, that a better opportunity was offered for the cholera spirillum to multiply and elaborate its toxin. Actually, however, such a condition is not brought about by this treatment. Long experience with the use of castor oil, neutral salts and other purgatives, including calomel, has demonstrated that treatment with these drugs frequently, if not usually, exercises an unfavorable influence over the course of the disease. Certainly, in the human intestine the cholera organism multiplies most rapidly in a fluid medium; moreover, the action of these purgatives tends to increase the catarrhal condition and to impair the resisting power of the mucous membrane of the intestine. Therefore, the purgative treatment during this stage of the disease can not be recommended, and the indications are to limit peristalsis and to put the intestine at rest. Practically all the intestinal disinfectants that could be tried by the mouth have also been made use of during the premonitory stage but so

far without satisfactory result. Either these substances become too dilute before they reach the organism in the lumen of the intestine or the bacteria have already penetrated too deeply into the glands of the mucosa for the disinfectants to reach them. Therefore, this method of treatment should also be abandoned.

By some observers enteroclysis (particularly the enteroclysis of catani with tannic acid) has been recommended in this stage of the disease. However, I believe, that the best results are to be obtained by bringing about as complete a rest of the intestine as possible. Confirmation of this idea may be seen from a study of those cases of cholera in which surgical procedures were adopted and where the abdomen and intestine were opened, a hollow sound introduced and the intestines washed out with a disinfecting fluid. Only unfavorable results were obtained.

The premonitory state of cholera, as is generally known, may either be overlooked or be absent, or at all events when the patient reaches the hands of the physician this stage has frequently been passed and that of evacuation already begun. During this period of the disease as mentioned, purging and vomiting are the most frequent symptoms. Hot fomentations and mustard plasters applied to the abdomen and small pieces of ice given internally may be of some value in checking the vomiting. All medicines by the mouth, with the exception sometimes of dilute solutions of cocaine, are of little avail; alcohol is contraindicated, washing out of the stomach has given rise to no good results and even attempts to remove by means of gastric irrigation the cholera poison, which it has been claimed by some observers is excreted by the gastric mucosa, have failed. The treatment in this state, therefore, resolves itself into an attempt to quiet the peristaltic action of the intestine as much as possible by the hypodermic use of morphia, and to secure as complete physical and physiological rest as possible. The cramps in the muscles frequently require appropriate treatment such as brief inhalations of chloroform.

The treatment with morphine should not be pushed when definite signs of collapse have appeared. During the stage of collapse the pulse furnishes the most important indication for treatment. If the pulse in the radial artery is present and the blood pressure not too greatly reduced, the patient requires little treatment beyond that made to conserve the body heat. If on the other hand, the pulse loses volume and power and becomes weak and thready, stimulants, preferably strychnine, hypodermically, are indicated. If the pulse disappears at the wrist more urgent action is called for. By far the most valuable treatment of all in the stage of collapse consists in the intravenous injection of saline solution, which should be administered in all grave cases. If no response is obtained from the hypodermic administration of strychnia, ether administered in a similar manner may be necessary in the interval before or

during the introduction of the saline solution. The question of the most desirable solution to be used for transfusion and of its composition will be left for discussion to the other papers to be presented. After the intravenous injection of normal salt solution, even in cases in profound collapse, provided a sufficient amount has been introduced, the pulse returns at the wrist, the face loses its pinched expression, the tissues lose their shrunken appearance, cyanosis disappears and warmth returns to the skin. In some cases it may be necessary to inject as much as 3 liters of the solution intravenously before the most favorable result is obtained. The pulse must be the main indicator of the amount to be introduced. When it reaches sufficient volume and the blood pressure has been restored, injections should be discontinued. Obviously, the transfusion should not be carried to a point where the pulse becomes bounding and the blood pressure is increased beyond its normal limit. One learns greatly by practical experience in regard to the amount of fluid to be injected intravenously in cholera.

The question has been raised as to whether the saline solution should be given intravenously or subcutaneously. If there is no radial pulse to be distinguished, the injection should unquestionably be given intravenously; in such instances subcutaneous injections can not be absorbed in time to be of any value. I have never observed serious results when the solution has been injected judiciously. The intravenous injection may be supplemented later by subcutaneous injections. Perhaps nowhere in medicine do we see the beneficial effects of treatment demonstrated to a greater degree than in the proper employment of intravenous injections of saline solution in the state of collapse in cholera. Many lives are undoubtedly saved by this procedure, and the mortality of cholera can undoubtedly be considerably reduced by this method of treatment. The results obtained may be frequently spoken of as brilliant.

When the subcutaneous method of injection fails entirely the intravenous method gives excellent results. In order to prevent the return of the collapse, should the purging recur, constant attention must be paid to the pulse and to the reintroduction of saline solution. Sometimes it is necessary to continue transfusion at intervals during a period of forty-eight hours or longer.

The other treatment of the stage of collapse consists chiefly in stimulation by means of full doses of strychnine, by conserving the body heat, and by symptomatic treatment of the distress and pain.

Another important symptom during the stage of collapse which requires speedy and special treatment is that of profound cyanosis and apnoea. This condition is brought about partly by the spasm of the pulmonary arteries, the lung refusing to transmit the thickened blood. Frequently only by immediate action can such a case be saved, for after coagula have developed in the right heart, death is inevitable. The administration

of nitrite of amyl or nitroglycerin to overcome the spasm of the pulmonary arteries, together with rapid intravenous transfusion of saline solution, is urgently indicated in cases with such symptoms.

After the stage of collapse, should diarrhoea persist, this may frequently be favorably influenced by large, high tannic acid enemata. In the typhoid stage of cholera should the temperature continue high, cold enemata may be of advantage. During this stage, should the tongue be coated and the secretion of bile violently interfered with, the administration of calomel in small amounts may be indicated.

By far the most important symptom requiring treatment in cholera, apart from the stage of collapse, is that of anuria, and the restoration of the urinary excretion is the most important symptom in determining the prognosis after the patient has survived the collapse.

It is particularly interesting to recall the statistics collected by Rumph and Frankel in relation to this symptom. Of about 700 cases of cholera in which no anuria existed, even in the first days of the attack, although the urinary secretion was considerably diminished, only about 4.7 per cent died. In 1,000 cases in which anuria was observed, 57.2 per cent died.

In this connection it is interesting to review the causes which give rise to the special symptoms of Asiatic cholera. The local effect of the spirilla in the intestinal mucosa, which is manifested by a severe catarrh, may be sufficient to explain the intestinal symptoms, such as the copious exudations, the violent diarrhoea and perhaps the vomiting, but the heart failure, cyanosis, nephritis, and other accompanying symptoms can not be explained in this manner. We may conceive that these disturbances may be brought about *first* by the enormous abstraction of water, both from the blood and from the tissues. Numerous analyses of the blood in cholera have shown that the specific gravity of the blood is increased and the amount of water decreased. The percentage of water in the tissues is also decreased, as was particularly shown by the careful observations of Buhl. The amount of salt in the blood and tissues is also decreased, while the organic matter is naturally increased. Whether the variation in the salt content of the blood is an important factor in producing the intoxication, therefore, is very doubtful, since the salts also pass into the intestine and are excreted with the water. *Second*, the symptoms may be brought about by the action of toxic substances, produced by the cholera spirillum and absorbed from the intestine, and *third*, by the shock which the central nervous system must receive through the terminal nerve fibers, which are exposed in the intestinal lesions. Just how much the anuria and subsequent nephritis occurs as a result of the abstraction of the water from the blood and tissues and just how much they are due to the action of the cholera toxin, is not altogether clear. However, it seems unquestionable to me that the abstraction of such enormous amounts of water from the tissues, resulting as it does in the increased thickening of the blood, its loss in

volume and consequent rapid fall of blood pressure, must play a very important rôle in the production of the collapse, and consequently, in the interruption of the blood supply of the kidney, with resulting damage to its parenchymatous cells. It is interesting to recall that when guinea pigs are inoculated intraperitoneally with lethal amounts of cholera spirilla, while before death a condition of shock is brought about with rapid pulse and progressive lowering of the temperature, undoubtedly due to the action of the cholera toxin, after death has occurred in these animals, no such advanced lesions of nephritis are encountered as are seen in the kidneys of human cases of cholera, which have succumbed after symptoms of anuria.

With the idea of throwing more light on this question, Dr. Teague and I have introduced into monkeys by means of the stomach tube and by subcutaneous injection large amounts of sodium sulphate in concentrated aqueous solution. We have found that by the introduction of this substance into the stomach we have been able to produce watery stools, intestinal catarrh with the contents of the bowels containing much mucous, and occasionally resembling the so-called rice water material of cholera and by the subcutaneous injections we have produced excessive subcutaneous œdema.

In most instances death of the animals in profound collapse has resulted, usually within a few hours. Time has not permitted us as yet to harden the sections of the kidneys and to ascertain what microscopical-pathological changes have taken place in these organs nor to determine accurately the cause of death of the animals. This, however, will be done and the lesions compared with those encountered in the kidneys in true cases of cholera. It may be mentioned that in one monkey the kidneys already presented evidences of nephritis, visible to the naked eye, with injection of the superficial vessels of the cortex.

If, therefore, as seems probable, the disturbance of the circulation plays such an important part in the production of the anuria in cholera and the subsequent nephritis, it seems still more important for us to watch and restore the circulation in the treatment of this disease and make good as early as possible the loss of fluid and thereby prevent at least some of those pathological changes which must result in the parenchyma cells of the kidney if the blood supply is even temporarily interrupted in this organ. Once the circulation in these organs has been profoundly disturbed, the restoration of their function becomes a much more difficult problem to treat, as does also the resulting uræmia which so frequently follows. The discussion of the further treatment of this very important complication, I shall leave to Dr. Nichols. I wish only to add that stimulating diuretics should not be employed in cholera uræmia. Their use is of no benefit and they frequently do harm.

In regard to the serum treatment of cholera no recent advances of

importance have been made. R. Kraus has claimed the production of a soluble toxin in certain cultures of the cholera spirillum and the production of a cholera antitoxic serum of value. I was able, last year, in Vienna, to go over this work with Professor Kraus. However, the animal experiments which he performed for me did not demonstrate that this serum possessed any greater value than the cholera sera we have prepared in Manila in former years. The most recent important results which have been obtained in the treatment of Asiatic cholera by antitoxic serum were those carried on in this city in 1906 by Dr. Denier of the Pasteur Institute. In all 52 cases of cholera were treated with serum. The injections were given intravenously and in large quantities, as much as 250 cubic centimeters in a liter of Hayem's solution being inoculated at a single dose. The average amount of serum given each patient was from 300 to 500 cubic centimeters, but in one case 1,000 cubic centimeters were inoculated in 24 hours. The cases in the hospital were treated alternately with serum; that is, every other case admitted received this treatment. The percentage of mortality in the cases treated with this serum equalled that in the cases which received no serum. We are convinced that the antitoxic serum treatment of cholera is of little value.

EXHIBIT E.

THE TREATMENT OF CHOLERA: A SUMMARY OF THE EXPERIENCES OF THE PHYSICIANS AT THE MARY JOHNSTON CHOLERA HOSPITAL.

[By Henry T. Nichols, Lieutenant, Medical Corps, United States Army.]

The conclusions reached¹ agree with those of the physicians at San Lazaro. The two serious conditions to be met are collapse and uræmia.

Collapse was overcome in 90 per cent of the cases by the intravenous injection of normal salt solution, repeated as often as necessary. The average number of injections given was two and the average amount of solution injected 2,800 cubic centimeters. The only cases that died early in the disease from collapse were very old patients and those who were moribund on admission. The giving of intravenous injections was greatly facilitated by receiving from the Bureau of Science sterile normal salt solution in 1 and 2 liter bottles which were heated and used directly as reservoirs by inverting them in a rack, after inserting a two-way cork with glass and rubber tubes. The injection was followed in several cases by chills, but no other bad effects were noted.

Uræmia followed recovery from collapse in nearly one-half of the severe cases and was fatal in about 33 per cent of all cases. The amount and character of the urine was closely watched in connection with clinical signs of uræmia and hot packs, rectal injections and fluid by the mouth seemed to be effectual in some cases. In others all measures, including diuretic counterirritations and blood letting, were without avail.

Bacteriological diagnoses were made in all cases within twenty-four hours after admission and two consecutive negative reports were required before discharge.

CONCLUSIONS.

I. Intravenous injection of normal salt solution greatly reduces the mortality of cholera from collapse.

II. The more the patients that survive collapse the more important uræmia becomes as a complication.

III. It is impossible to tell which patients will develop severe uræmia and after the onset of this complication all measures may fail.

¹ By Dr. Strong.

EXHIBIT F.

A SUMMARY OF THE RESULTS OBTAINED IN THE BACTERIOLOGICAL DIAGNOSIS OF CHOLERA.

[By Moses T. Clegg, of the Biological Laboratory, Bureau of Science.]

The bacteriological examinations of the stools of cholera patients during this epidemic were carried out according to the enriching method as follows:

Cultures were made in peptone solution (1 per cent Witte peptone and 0.5 per cent sodium chloride in distilled water) and kept at ordinary tropical room temperature (about 30° C.). After three hours transfers were made from the surface of the cultures to fresh peptone tubes made on alkaline agar slant tubes. These remained at ordinary temperature for from twelve to fourteen hours.

In a series of 500 cases examined, including both acute and convalescent patients, there was a constant morphology of the organism and no great variability in the degree of agglutination. Clumping occurred generally within a period of fifteen minutes in dilutions of 1 to 400 and 1 to 500.

Specimens for bacteriological examination collected by inserting sterilized rectal tubes were found to be more satisfactory than those collected by enemas. In an average of 1,000 patients harboring the cholera vibrio it was found that the shortest length of time the organisms remained present in the intestine and could be recovered from the faeces was five days and the longest eighteen days.

EXHIBIT G.

REPORT OF THE SPECIAL COMMITTEE OF THE MANILA MERCHANTS' ASSOCIATION.

MANILA, December 22, 1908.

To the PRESIDENT, MANILA MERCHANTS' ASSOCIATION,

Manila, P. I.

SIR: Pursuant to your instructions given in your resolutions of October 12 last, your committee on cholera investigation begs to report:

That organization was effected on October 14. Work was commenced immediately and has been prosecuted diligently.

On October 20, this committee, together with the Acting Director of Health, Mr. Welch and Mr. John C. Meehan, visited various portions of the city for the purpose of investigating their sanitary condition. In all, nine districts were visited. These, together with comments thereon, were as follows:

1. *Interior of Calle Principe, San Nicolas.*—This property evidently belongs to the Insular Government, being within the 30-meter strip of tide lands. The property is situated within the strong-material district. The officials in charge of the issuance of permits for repairs and construction have evidently paid not the slightest attention to the various ordinances covering either construction or repairs and in no single instance has the law been observed. There is not a single shelter in the entire collection that does not show many cases of very recent repairs.

2. *Interior of 87 Aceiteros.*—Here can be found some new ideas in model sanitary convenient shambles, erected under license from the proper city authority, in the strong-material district. Posts stuck into the ground, covered with a varied lot of old tin, sheet iron, sides of old boxes and divided into stalls. The ground for a floor and absolutely no sanitary conveniences whatsoever. With only three sides covered and no kitchens or other quarters, conditions during rainy season are not suitable for swine. Absolutely no sanitary arrangements of any kind. The dumping of defecation in an adjacent street witnessed. Who issued permits? Who inspected premises? Both these officials should be sent to the States for instruction in building inspection.

3. *Calle Folgueras, San Nicolas.*—In the hard-material district. Building laws entirely violated. Nipa shacks repaired recently and being repaired. Pools of *stagnant* water in the street for over two blocks.

4. *Calle Salinas, Tondo.*—In the hard-material district. Building laws openly violated. New nipa roof at present under construction.

Many other evidences of very recent shabby repairs. All sanitary laws set at naught. Possibly all tenants squatters, occupying ground on sufferance only. No evidence of building inspection.

5. *Santa Monica*.—Unsanitary. Building of street without culverts causes water to stagnate. Expenditure of reasonable sum would afford drainage. Esteros flowing through this district could be deepened and the waters would be drained with the tide. No water supply. Immediate installation of water system imperative.

6. *Antonio Rivera*.—Hard-material district. No effort evidently made by city authority to enforce ordinance against erection or improvement of nipa shacks in hard-material district. District covered with miserable class of shacks. No latrines and no water supply. Offal and defecations thrown on the ground. Fearful unsanitary conditions in every particular.

7. *Palomar*.—Conclusive evidence of the failure of the Municipal Board to interpret the building ordinances with any degree of intelligence. Municipal Board now granting permits for unsanitary structures not 2 meters high, no floors.

8. *Santa Clara*.—In the rear of Bilibid Prison. This is a closed barrio and is on land owned by the Insular Government, a part of the San Lazaro Estate. Here conditions were found to be frightful from a sanitary point of view. Refuse and filth being dumped into pools where washing of clothes was also in progress. This district has no roads permitting the entrance of vehicles of any kind; garbage can not be removed by reasonable means. There are no latrines and no pail system. City water must be carried a great distance, practically unavailable so that the inhabitants have been compelled to drink the water from filthy wells and water holes. Cholera lurks in this neighborhood and cases are found here almost daily, notwithstanding that the Health Department is making every effort to disinfect and make conditions better with the means at their disposal. Infection in Bilibid Prison can undoubtedly be traced to this source.

9. *Bilibid Viejo in the rear of San Sebastian Church*.—In the heart of the city. If a single municipal officer with any authority whatsoever ever visited this place and did not immediately take active and *violent* means to cause an abatement thereof his resignation should be demanded. All building and sanitary laws are grossly violated. Condition of estero demands either immediate drainage or immediate filling.

Copies of the above were furnished the Hon. D. C. Worcester, Secretary of the Interior, and Mr. Percy McDonnell. The discussion that followed seems to have awakened a real interest in the conditions depicted and many of the evils that beset us, as far as sanitary conditions are concerned, seem in a fair way to be remedied as well as is possible at this late day.

Interviews were held with Mr. Percy McDonnell and Mr. Felix Roxas covering conditions as we found them. These interviews developed

the fact that there has been a serious lack of coöperation between the Bureau of Health and the Municipal Board. The Bureau of Health has attempted, as far as we can elicit, to attend to its duties in a careful and competent manner. In this they have been apparently handicapped by the authority of the Municipal Board. This latter body evidently showing an entire lack of good judgment in the enforcement of such ordinances.

The members of the Municipal Board seem to have shown a woeful lack of appreciation for sanitary conditions here, both as regards buildings and lands. Regular, personal canvass of the city seems to have been thought unnecessary by those whom we interrogated. When asked the reason for the nonenforcement of the ordinances, "pity," was the only reply, pity for the poor miserable occupants of miserable hovels. Pity that offered no alternative. It is pity that is largely responsible for the Board's inaction, pity that is responsible, to a great extent, for our last epidemic of cholera. It is this pity that for years has blocked the sanitary regeneration of 80 per cent of our population and endangered the lives of the other 20 per cent.

The improvement of the city in a sanitary way, has been restricted almost entirely to the new water and sewer systems. The relief that will be afforded on the completion of these will be great; but the expenditure of this money will be wasted, as far as general health is concerned, unless thorough, constant and immediate attention is paid to the nipa barrios and many unsanitary districts within the confines of our city limits.

The public improvements in the Malate and Ermita district have been favored to the exclusion of those districts where the greatest portion of our population exists. The filling of unsanitary lands, occupied for dwelling purposes, and the building of public latrines, where the pail system has not been installed, have been almost entirely neglected. Drainage is unheard of. Streets have been built that inclose entire blocks of land causing water to stagnate, filth to accumulate and disease to breed. Such conditions can best be shown in the San Lazaro Estate and in the Santa Monica district. The raising of Calle Azcarraga above the level of the surrounding property is fraught with much danger. Drains should be so constructed that interiors contiguous to them may drain at all stages of the tide and all seasons of the year.

Dr. Saleeby, of the University Hospital, in his last annual report, puts the question very aptly, viz:

We find a large portion of the inhabitants of Manila living in marshes and in filth, and no attempt is made to remedy their condition. The poor, if neglected, invite disease to their homes and convey it to the homes of the rich. The poor are bound to remain with us all the time. Their health should be of great concern to all. It is important in itself, and it is further necessary for the protection of the community as a whole. Once an epidemic finds its

way into the houses of the poor it gets control of the city and menaces the rich as well as the poor. It therefore behooves the city of Manila to give more attention to the dwellings of the poor and to the districts where the lower class of its inhabitants live. It does not seem wise or proper to be giving so much attention to boulevards and parks while a large number of Manila's citizens have to wade through mud and marsh to get to their houses. It is certainly not right to lavishly beautify some streets, while others remain below the level of high tide and are, at times, more suitable for boats than carriages. We certainly think that regulations for the protection of the city against cholera, plague or beriberi are as important and as necessary as regulations against fire. It is essential to have our houses proof against epidemic disease as against any visible destructive agent. Man's life is more valuable than property and health is the best treasure on earth.

The majority of the people in Manila and the provinces build their homes on locations which are damp and marshy for the greater part of the year. Refuse is carelessly disposed of underneath and around the buildings. Adults and children wade through muddy surroundings barefooted and eat with their fingers. In Manila, the filth that surrounds the houses of the poorer classes is extreme. In the "nipa shacks" or settlement districts no sanitary rules seem to be observed. The land is over-flowed by tide water, is always wet and often marshy. The people bathe in dirty, stagnant esteros and drink river water. *It is a wonder that epidemics cease in the city and in similar localities throughout the Islands.*

Dr. Saleeby is not alone in his opinion, for cholera and its other vile companions can not live, for any material length of time, in the city of Manila. The city of Manila, clean, is not their abiding place. The Pearl of the Orient, to-day, is their incubator.

Added to the conditions we find prevailing here, if the statements made in "The History of Asiatic Cholera in the Philippines" by Hon. D. C. Worcester are half true, it behooves our present Insular Administration to solve the question. The present Municipal Board has shown itself unfitted to handle the situation. We have in our midst men who have shown their ability to handle public affairs with common sense and genuine ability. Let such men take the place of the dead timber that encumbers our progress and thereby increase the efficiency of the entire civil list. Merited promotion will greatly add to individual effort for public good.

Dual authority, covering the health of the city, should be done away with. All matters of such great importance to us all should be placed in the hands of those who are able to handle the situation. Trained engineers and medical men are available here. If the Board of Health is able to handle the situation, pass it over to them and make them solely responsible. If present conditions continue we will be compelled to postpone or discontinue the Carnival for this year. Measures both temporary and permanent should be taken and enforced to make Manila the training ground for every municipal officer in the Islands; we have but little to show them as an example to-day.

JOHN GIBSON, *President.*

ARTHUR COHN, *Secretary.*

EXHIBIT H.

NOVEMBER 14, 1908.

Mr. S. ERLANGER,

Chairman of Committee of Merchants' Association, Manila.

SIR: I have the honor to acknowledge receipt of your letter transmitting the informal reply of Mr. P. G. McDonnell, of the Municipal Board, to the first report of your committee.

I note that you transmit therewith a document entitled "A Compilation of the Acts of the Philippine Commission" and that this is referred to in your communication as having been furnished by Mr. McDonnell and purports to embody the "various ordinances under which authority for sanitary work in the city of Manila is based." Permit me to suggest that it does embody only those portions of existing laws and ordinances which prescribe the powers and duties of the Director of Health and other officers and employees of the Bureau of Health relative to sanitary matters and that it omits all mention of any one of the various provisions imposing powers and duties upon officers and employees of the government of the city of Manila. This so-called compilation contains no mention of any one of the provisions of the building ordinance, the persistent violation of which has played so important and disastrous a part in bringing about the present sanitary condition of this city.

I note that the city engineer has prepared another lengthy memorandum relative to the specific cases of unsanitary construction which have already been so fully discussed. It is evident that we might continue this discussion indefinitely but it seems to me entirely needless. We should but be following the example of the two ancient Greek philosophers who had the acrimonious discussion over the number of teeth possessed by a horse without its ever occurring to either of them to open a horse's mouth and count its teeth. I suggest that if the committee has any lingering doubts as to the unsanitary conditions which have arisen as a result of unlawful construction in the cases mentioned it observe for itself the conditions as they exist and form its own conclusions.

I had just dictated an indorsement to the Director of Health forwarding these papers to him for comment when I received a supplement to his recent report on the cholera epidemic which covered what seemed to me the essential points in the matter now under discussion so fully that, in view of your verbal statement to me that time is short and that the committee is anxious to have these papers returned as soon as convenient,

I will return them to you direct together with a copy of this supplementary report and the following suggestions which I venture to make.

In general where nipa shacks have been repaired in defiance of existing ordinances, or have been unlawfully constructed, the city engineer explains these occurrences by saying that *permits for such repairs and construction were not issued by him and that it is difficult to secure evidence which will suffice to convict persons who illegally repair such houses.* In this connection the city engineer says:

"All that this office can do is to refuse permits to repair or construct buildings and to call the attention of the police to such violations of the ordinances as come to the knowledge of the building inspectors. The work of the building inspectors is primarily to inspect the construction of buildings for which permits have been granted and the present force is sufficient for such work only. The building inspectors are not authorized to make arrests."

In a report written on September 3, 1908, the city engineer has made the following statement:

"Attention is respectfully invited to the fact that the personnel of this office devoted to the inspection of buildings, including examination of plans, etc., consists of a chief inspector, American, and four assistants, Filipinos. This force during the fiscal year 1908 made inspections on 5,864 applications of which 1,570 were for construction and 4,294 for repairs besides 400 miscellaneous permits. In the case of construction frequent visits are necessary throughout the period covered, sometimes several months. It will therefore be seen that this force is taxed to its utmost *and that it is physically impossible to watch every move made by every contractor engaged in work on these buildings.*"

The statement of the city engineer relative to the insufficiency of the force authorized or employed by him is no doubt conservative. The force is, of course, ridiculously inadequate. It is not an unknown procedure, when a law or ordinance is of such a nature that its enforcement is likely to provoke marked hostility, and when those charged with the duty of enforcing it desire to escape unpopularity, to neglect to employ a suitable number of men to make its enforcement possible. In view of the well-known fact, which I believe no official of the city government has denied, that nipa houses are constantly being repaired, and even constructed, in defiance of existing ordinances and regulations, and in view of the further statements made by the city engineer as to the insufficiency of his force not only to prevent such occurrences or to note them and make complaint against the guilty persons but even to perform the other regular work of his office, it would seem pertinent to ask the question: *Why has not this force long since been materially augmented and what prospect is there that it will be augmented in the immediate future to such an extent as to render possible the proper performance of the work imposed upon it by law?*

I am of the opinion that the record for the present year of 160 complaints and prosecutions and 133 convictions for violations of the

building regulations is not one to which the municipal officials can well point with pride, particularly when it is remembered that the fine imposed for the erection of a nipa house in violation of the law has frequently been *one peseta*, a fact which the city engineer forgets to mention.

I now come to the other excuse which has so often been given for allowing the erection of unsanitary buildings, namely, that the city engineer has written across the face of the permit, "not to be used for human habitation."

The city engineer stoutly maintains that he has no right to question the good faith of persons making such statements and that so long as *they say* that the buildings are not to be used for human habitation he must allow them to be erected and then leave the rest to the Bureau of Health. In reply to this contention I beg to say the authorizing of these unsanitary structures with the proviso that they are not to be used for human habitation, when the city engineer, if he is possessed of ordinary common sense, knows what everyone else knows, that they will be so used the moment they are completed if not before, simply results in legalizing evasions of the law. So persistently has this policy been followed, in spite of the numerous protests that have been made, that I am forced to the opinion that it is a procedure followed deliberately for the purpose of throwing the onus of this whole matter on the Bureau of Health.

The extract from existing laws and ordinances relative to the powers and duties of the latter bureau and its officers in these premises seems to have been submitted by Mr. McDonnell without comment, but it is entirely apparent that he either had *nothing* in mind when he submitted it or he had in mind to show that the sanitary conditions of the regions under discussion were due to the neglect of duty on the part of the Director of Health and his subordinates in the matter of compelling the making of repairs or the vacation of buildings too unsanitary to be fit for human habitation. As it is fair to suppose that Mr. McDonnell was not without purpose in forwarding this compilation of the laws and ordinances, we find him *apparently* explaining the unsanitary conditions of these regions as a result of the failure of the Director of Health and his subordinates properly to exercise their powers; but there really is no room for doubt as to his attitude in the matter, for during the inspection trip made by the Municipal Board and the undersigned through these regions Mr. McDonnell repeatedly called attention to the fact that the *Director of Health* had it in his power to remedy these conditions by compelling the abandonment of the unsanitary buildings and sites. So much for his attitude when dealing with the Department of the Interior and with the committee of the Merchants' Association.

I now invite your attention to an article in the *Cablenews* of this date purporting to be an account of a speech made by Señor Mendiola of the Municipal Board, and to the statement made in connection therewith by

Mr. McDonnell. I have consulted Mr. McDonnell by telephone and he informs me that this article is substantially correct. Briefly, Señor Mendiola demanded that the Municipal Board intervene to prevent the Bureau of Health from compelling the abandonment of certain unsanitary shacks. *Señor Mendiola called attention to the fact that here was an opportunity for the city fathers to set themselves right with the public* and Mr. McDonnell stated that "they disliked appearing as the evil genii of the people but that they could not transgress the law" and that "in times past they had endeavored to protect the *barrio* people from too harsh an application of sanitary and remedial measures and that they had been criticised for so doing."

It would seem, therefore, that for the purposes of your committee Mr. McDonnell, representing the Board, finds that the Director of Health and his subordinates have been too lax in the exercise of their powers to compel the abandonment or repair of unsanitary buildings, but that when talking for publication the view of the Board is that in times past the application of remedial sanitary measures has been too harsh; *and that in effect the one thing that keeps the Municipal Board from intervening in behalf of the people is the fact that they can not do so without transgressing the law.*

Such an attitude serves to render needlessly difficult the position of the Director of Health and his subordinates. In point of fact, as is doubtless well known to your committee, the latter have compelled the abandonment of numerous unsanitary shacks. In practically every case such action on their part has been made the basis of savage criticism if not of attempts by demagogues to stir up the populace to open revolt. I submit herewith the translation of a recent article from *Los Obreros* which will show the difficulties thrown in the way of the Bureau of Health by irresponsible newspapers. Nevertheless the Bureau has persisted in this work.

I now desire to call your attention emphatically to the fact that if its efforts are to amount to anything there must be corresponding efforts on the part of the city engineer to prevent the unlawful construction and repair of nipa shacks and the erection of unsanitary buildings.

It would seem to be a fact that the people ejected from unsanitary houses do not evaporate or otherwise disappear over night, but must go somewhere. Were there decently proper observation of ordinances relative to the construction and repair of nipa shacks and the construction of other buildings we should gradually provide them with suitable places to go, but what *does* happen is that they at first crowd into other nipa-shack districts adding the evils of overcrowding to those already existing, and ultimately erect new shacks for themselves often on forbidden ground so that our last state is as bad as our first, if not worse, and the Bureau

of Health incurs the onus resulting from routing these people out of their filthy and unsanitary homes without accomplishing any substantial good.

It must be evident to every member of your committee that such a condition of things can not longer be tolerated if we are to stop talking and get to work. In view of the apparent disposition of at least some of the members of the Municipal Board to strive to please the public in this matter, and of the persistent policy of completely ignoring, or indefinitely delaying action on, the recommendations of the sanitary engineer and the Director of Health, exemplified by the correspondence which I have published in my recent cholera report and that which the Acting Director of Health furnished in his supplementary cholera report transmitted herewith, I strongly recommend that all authority in connection with the sanitary inspection of buildings and the prevention of the unlawful erection and repair of nipa shacks be withdrawn from officers of the city of Manila and conferred upon the Director of Health and his subordinates so that authority and responsibility relative to these matters may not be divided. The Bureau of Health will then be left free to undertake to improve the buildings of the city, and I beg to assure you that it will do it without fear or favor, while to the Municipal Board will be left the more popular rôle of sympathizing with the unfortunate victims of the harsh measures imposed by the Director of Health! If this change is to be made certain provisions of the present Building Code must be cut out of it and inserted in the Sanitary Code.

The work necessary to clean out the esteros and provide street drains must, of course, continue to be performed by the city engineer's office, but as the performance of this work does not necessarily involve those responsible for it in unpopularity that office might not object to continuing to do it. The Bureau of Health has no machinery for the performance of such work but it has a sanitary engineer and if he is provided with a suitable number of subordinates, which can readily be done, his force would be able satisfactorily to perform the work which I suggest be transferred to the Bureau of Health.

Please bear clearly in mind the fact that neither the Director of Health nor the Secretary of the Interior hanker for this job. Both of them, however, desire to see it done, and I at least am of the opinion that it never will be done by the city engineer's office as at present constituted. In fact it seems to me to have been demonstrated very conclusively that the city engineer's office has not, up to the present time, had the slightest intention of seriously attempting to do it.

Very respectfully,

DEAN C. WORCESTER,
Secretary of the Interior.

P. S.—Referring to your statement relative to the failure of the Bureau of Health to insist on the enforcement of the ordinance providing for a 3-meter strip at the back of lots in the case of two pieces of property on the Escolta, if you will refer to the second paragraph from the bottom of page 67 of my recent cholera report you will find that it was on account of the decision of the Director of Health to demand the enforcement of this provision of law that the Municipal Board repealed it. So long as the Director of Health did not insist the Board was willing to let it stand.

EXHIBIT I.

[Translation.—From *Los Obreros*, issue of October 24, 1908.]

ALWAYS PERSECUTED.

Two odious Boards¹ proceed in perfect concubinage. The Board of Health and the Municipal Board are without doubt attacked by the mortally direful virus of the chimera which consecrates blunders with holy oil and with fatuous arrogance places error on the altar. One commands poorly; the other obeys worse. The Board of Health goes on extracting from the corrupt and slimy chapter of an abortive science advice and prescriptions, and our Municipal Board, servile and solicitous though being fully convinced that the order is a hygienic heresy, cowardly bends its head and, only in order to please the Board of Heiser and McLaughlin, sends out upon the streets and into the suburbs of the Bitch of the Orient² its legions of agents incompetent in learning and experts in procedures fully worthy of Kaffirs.

Aside from the terrible calamities that we residents of Manila are suffering, all through the fault of the highly criminal complicity of the two Boards, which we support with a patience worthy to be better employed, those two guillotines of our well-being, wrongly called Health and Municipality, we are induced to enter the burning arena of the topics of the day, full of excitement and noise, by the dreadful question of the demolition of the small nipa houses inhabited by poor workingmen without means of any kind. To-day we raise the first patriotic and human cry of alarm, and with the rash valor of pure and honorable conviction, we shall, when the times comes, not only accuse the Board of Health and the Municipal Board of being stupid, brutal and unsuccessful, but we shall also declare them to be "The founders of tenebrous anarchy" in the Philippine Islands. How well one can see that both the Board of Health and its accommodating sexton the Municipal Board are not aware of the volcanic fire of popular indignation, when, foolish and imprudent, they wish to play with it!

¹ Instead of the word *junta* (board), the writer uses throughout his article the word *yunta* (a yoke, team or span of draft animals), as a term of derision. Note phrases "kick up their heels," "the unproportionately long ears of that other team," etc.

² "Perra del Oriente," a play on the term "Perla del Oriente" (Pearl of the Orient).

But both are right in proceeding in this way, carrying out before our eyes and in the blinding light of evidence a programme of ignorance and incompetency which redounds to the prejudice and death of the people of Manila and also of the entire Filipino people. They are both guilty; those two Boards are alone guilty of the crimes attributed to them by public opinion; but we have certain irreconcilables who say that the Government itself ought not to be considered clear of serious criminal and punishable responsibility, because of its having appointed to those high offices persons notoriously incompetent and, what is worse, because it takes pleasure and pride, with cynical audacity, in securing them in their positions after so many clamors of public opinion and of the press which have proved and evidenced to satiety that those two Boards, apparently composed of rational men and therefore obliged to proceed with reason, are the first to kick up their heels, without even taking the trouble to reflect that by that irrational explosion they might injure or destroy sacred interests and respectable entities.

If the Government in its high wisdom and foresight does not put a just and immediate stop to the vandalic excesses of these two Boards which constitute the target of the hatred and malediction of the Filipino people and of the cosmopolitan population of Manila, it also may come fully within our charge and our censures, as co-founder of anarchy in the Philippines. We ratify what we have said. Those two Boards unless they immediately change their plans and procedure, will set ablaze with the fire of death the sleeping and still latent social question in the Philippines, to-day inoffensive and unknown to those continually persecuted and trampled upon in all the countries and in all the societies of the entire world. We firmly believe that we fulfill a duty of high patriotism in shouting into the ears of our authorities the cry of alarm, the sincere warning to be on the watch, to awaken them from their profound lethargy and carry to their clear and upright judgment the light of wise forethought and a dose of profitable perspicacity. It is not advisable nor prudent that our unmindful Government should allow those two Boards with which we are afflicted, to play with dangerous explosives, such as abuse and outrage, constantly applied to the already tired out meekness of the people.

In the present important matter of the barbarous and inhuman destruction of the nipa houses, there is not the least reason for invoking the powerful cause of the *Salus populi suprema lex*. The hurried tearing down of those little houses shows once again the supine incompetency of our perpetually unwise Board of Health, because the obligating reasons of hygiene are based in particular on practices of prevision and not on precipitate action at the last moment, applied in the form of despotic orders against the unfortunate, against the small, the poor and the humble, who suffer and succumb in the most complete abandonment and

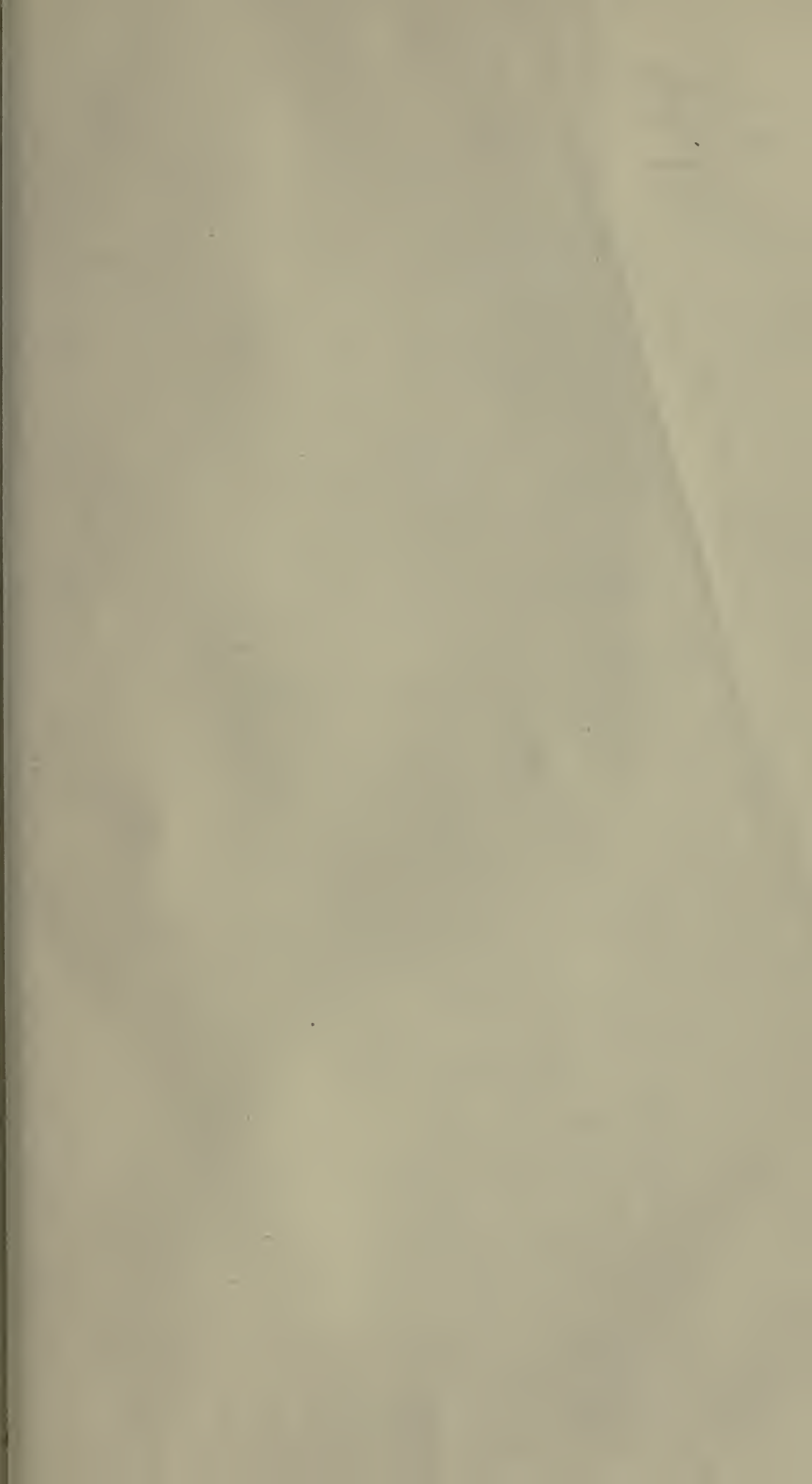
forlornness. If the Board of Health, in its *remarkable infused science*, believed that those miserable little nipa houses, if left standing, would be perpetual focuses of morbid infection, whether choleric or not, it should have pulled the unproportionately long ears of that other team, the Municipal Board, and could have given notice in plenty of time that on such and such a date thousands of poor wretches would be ejected from their little houses who never committed any other crime than that of having been born and having lived honorably without fortune or riches. Then that Municipal Board of our evils and sins should, with foresight, have aided them and prepared the land on which to lodge those numerous unfortunates, ejected everywhere, eternally fallen from grace and victims of a social shipwreck a thousand times more dreadful than the horrors of the sea. That Municipal Board should have furnished means to the needy class which, lacking even the absolute necessities of life, could ill afford the luxury of taking their little houses out for a walk or in a procession from one part of the city to the other, merely in obedience to the whimsical frown of our mortally sinful Board of Health. And this *wisest amongst the wise* could, with the enormous appropriation it has allotted to it for *useful and discreet* expenses, have put the quagmires and pools of the district of Tondo into a sanitary condition; could have disinfected the pestilent nooks of so many *interiores*; could have converted the bog that is a focus of death, into a florid orchard which lends charm to life. Nothing, absolutely nothing of rational hygiene was done. Precipitately and even with cold cruelty many residents, as much taxpayers as those of Ermita, were left to their fate; their wells were closed without their being furnished with a single faucet of potable water; the water which they used for washing and cleaning was spoiled with poisonous disinfectants, without being replaced by artesian well water; wholesome vegetables to which Filipino stomachs were accustomed were abolished and replaced by canned goods of foreign origin containing purulent bandaged small fingers; they destroyed the truck gardens, paying a ridiculous and insufficient indemnity and when the poor man and the laborer were terribly besieged by thirst and hunger there comes a ferocious new ukase from our little Cæsars to oblige, hastily and precipitately, those poor wretches, persecuted by the unsuccessful powers of the earth, to live exposed to the inclemencies of the weather and to contemplate with unforgettable wrath the destruction of their loved though miserable homes.

This odious question of the little nipa houses should have been decided by the Board of Health and by the Municipal Board in any form and manner other than by the ejection of the poor without means, who were forced to provide themselves at once with some other habitable place for their lodging. The Merchants' Association of Manila obtained a credit of 30,000 pesos to be used for the sanitation of the most extensive and

populous district of Manila. Here again against our wish and without looking for it, we stumble against the eternal stupidity, insolence and improvidence of our authorities. They have petted, adorned, and made sanitary, to an extreme, unjustly in every respect, the district of Ermita, to-day converted into a little American Eden, and notwithstanding, Tondo, Trozo, Paco, and other districts have received from these two Boards, twins in sin and Siamese twins in responsibility, nothing but forgetfulness, disdain and abandonment, deserving of hanging or at least life imprisonment.

And now that the cholera, whose choler has risen to its height, endeavors to annihilate all the residents of Manila, they are thinking of demolishing nipa houses and putting their hapless inhabitants into the open air, perhaps in order to prevent their becoming moth-eaten. Those two lamentable Boards have adopted the cursed system of not locking the door until the horse has been stolen. In free countries and with governments which do not scoff at nor despise public opinion, this would be more than sufficient grounds for prosecuting and convicting those scientific nullities of the less scientific of our Boards. It has been thoroughly demonstrated that the Board of Health is utterly ignorant of the most elementary rudiments of therapeutic hygiene and of other branches of essential and indispensable knowledge for physicians, especially for the ostentatious Directors of Health brought by cable as something superior and magnificent, and it also has been proved beyond a shadow of a doubt that the Municipal Board, led by the nose by the former, is the most direful plague that we have at the head of the city government, because, debased and cowed by fear, it offers not the least opposition to the detrimental blunders committed against us by the Board of Health, and neither controls the interests of the people governed by it, nor dares to come out in defense of the home, the health, and the lives of the derided and ever-patient residents of Manila.





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